

Equipment 439

Oldsmobile, 1928-1929

LIST PRICE \$22.50

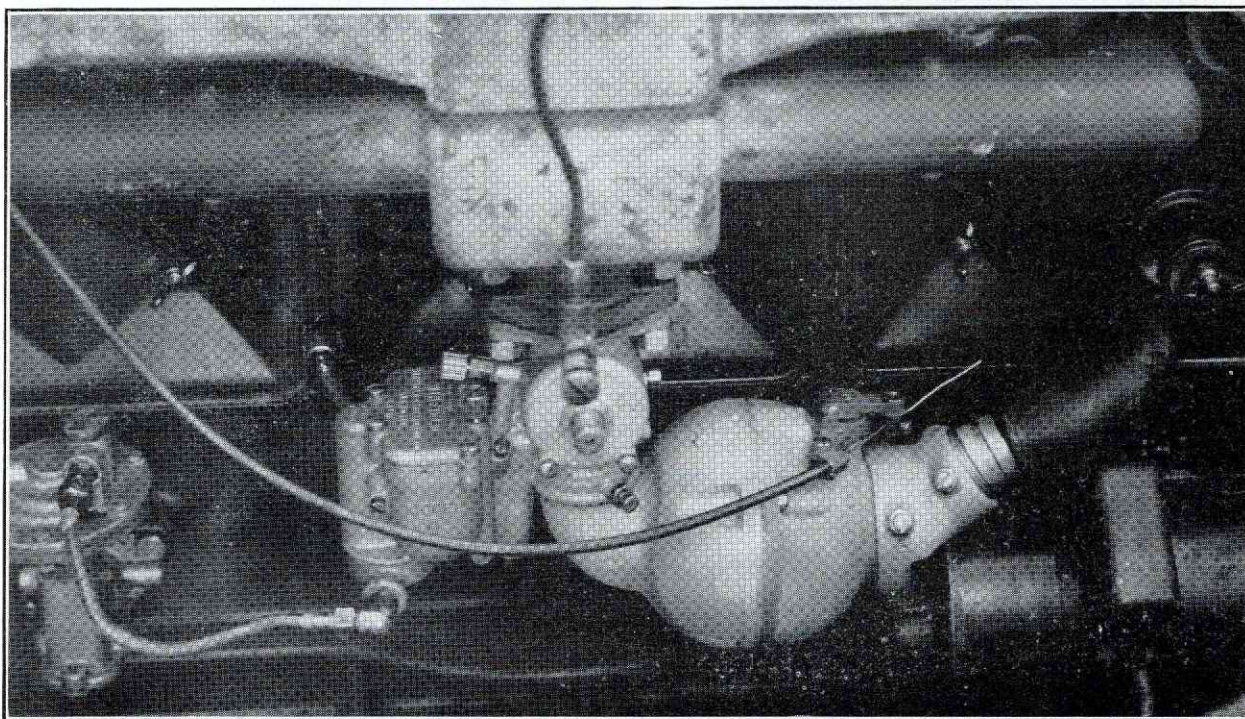


PHOTO SHOWS INSTALLATION ON 1928 OLDSMOBILE

DIRECTIONS FOR INSTALLATION

Examine the illustration above before you start.
The following method of procedure is recommended:

- 1—Remove the carburetor and the air cleaner.
- 2—Bolt Winfield to the manifold as shown above. Use the new gasket that is furnished. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange, and this warpage will cause an air leak, that results in poor idling and poor low speed performance. Above all, **never use shellace or any other preparation on the gasket.**
- 3—The foot throttle arm is connected to the original rod on the side next to the motor as shown above. Make sure that the throttle on the carburetor opens to wide-open position when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this: have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop, you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop full power and speed.
- 4—Connect up the gasoline line. Use the original line and the original gas fitting.
- 5—Install the silencer and choke in the usual manner with the cable holder on top and facing toward the rear as illustrated. The choke control is connected to the arm and holder assembled on the silencer. In making this hook-up, be sure that the choke on the dash is pushed all the way in before you make your setting. And when the dash choke is fully pushed in, make sure that the choke valve in the silencer is wide open. And see that the choke valve is fully closed when the choke control on the dash is pulled out. A partially opened choke when the dash control is pulled clear out will result in very hard starting. A partially closed choke after the motor is warmed up will ruin the gas mileage.
- 6—Fasten the Crankcase Ventilator Adapter to the throat of the silencer as shown in the illustration. Insert the flexible tubing in the drilled part of the adapter.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed of the motor may be obtained by unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment.

OTHER ADJUSTMENTS—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clockwise direction to about 16 notches. The following is a good way to obtain an exact adjustment. Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needle in a counter-clockwise direction to about 18 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you feel maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that the ignition should be in first-class shape to get the best

results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire—there is more resistance. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

1—Check the spark plug clearance. The proper clearance is .025.

2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.

3—The coil may be weak. Test the coil or try a new one.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the valves and spark plugs.

1—Check the compression on each cylinder using the hand crank.

2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

1—If the points are pitted, file them smooth or install a new set.

2—The gap on the distributor points should be .018, or it will not make a good contact at high speeds.

Equipment 439

OLDSMOBILE, 1928-1929

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer.....	2.50
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	143—Adapter for Crank Case Ventilator.....	1.00
1.....	54-E—Flexible Tubing .....	.25
		<hr/>
		\$22.50

This Carburetor is installed on the right hand side of the motor with the float bowl to the rear.

The Carburetor Flange is tapped 5-16" U. S. S.

The Silencer points toward the front with the Cable Holder on top.

The Throttle Lever is installed on the throttle cover side next to the motor.

The flexible tubing is connected to the crankcase ventilator adapter.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 439

Oldsmobile, 1928-1929

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer	2.50
1.....	36-B-1—Choke Lever75
1.....	38—Cable Holder50
1.....	33-B-1—Throttle Lever50
1.....	143—Adapter for Crank Case Ventilator.....	1.00
1.....	54-E—Flexible Tubing .....	.25
1.....	57-D-1—Gas Fitting .....	.25
		\$22.75

This Carburetor is installed on the right hand side of the motor with the float bowl to the rear.

The Carburetor Flange is tapped 5-16" U. S. S.

The Silencer points toward the front with the Cable Holder on top.

The Throttle Lever is installed on the throttle cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 440

Essex Six

This installation supersedes Equipment 104, which has been discontinued. This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer.....	2.50
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-10—Throttle Lever .....	.75
1.....	89-B—Elbow, including 2-26 Lock Screws and Nuts.	
	2 65-A-1 Cap Screws, 1-102 Plug.....	3.00
1.....	101—Shelby Tubing .....	.25
1.....	54-G—Flexible Tubing .....	.25
		\$25.00

Assemble hot spot Elbow on motor with Shelby Tubing in place. Spot hole in exhaust manifold through Shelby Tubing. Shelby Tubing should always be used as a guide for the drill as this will eliminate any possibility of enlarging hole in elbow.

Next remove Elbow and enlarge hole in exhaust manifold to tubing size or $\frac{1}{2}$ ". Hole in elbow may now be plugged with the plug furnished. Insert the plug, being sure the convex side is out. Next punch the plug directly in the center till it is firmly wedged in the hole. The carburetor may now be assembled on motor as follows:

This Carburetor is installed on the right hand side of the motor with the float bowl pointing to the front.

The Carburetor Flange is tapped 5-16" U. S. S.

The Silencer points to the rear with the Cable Holder next to frame.

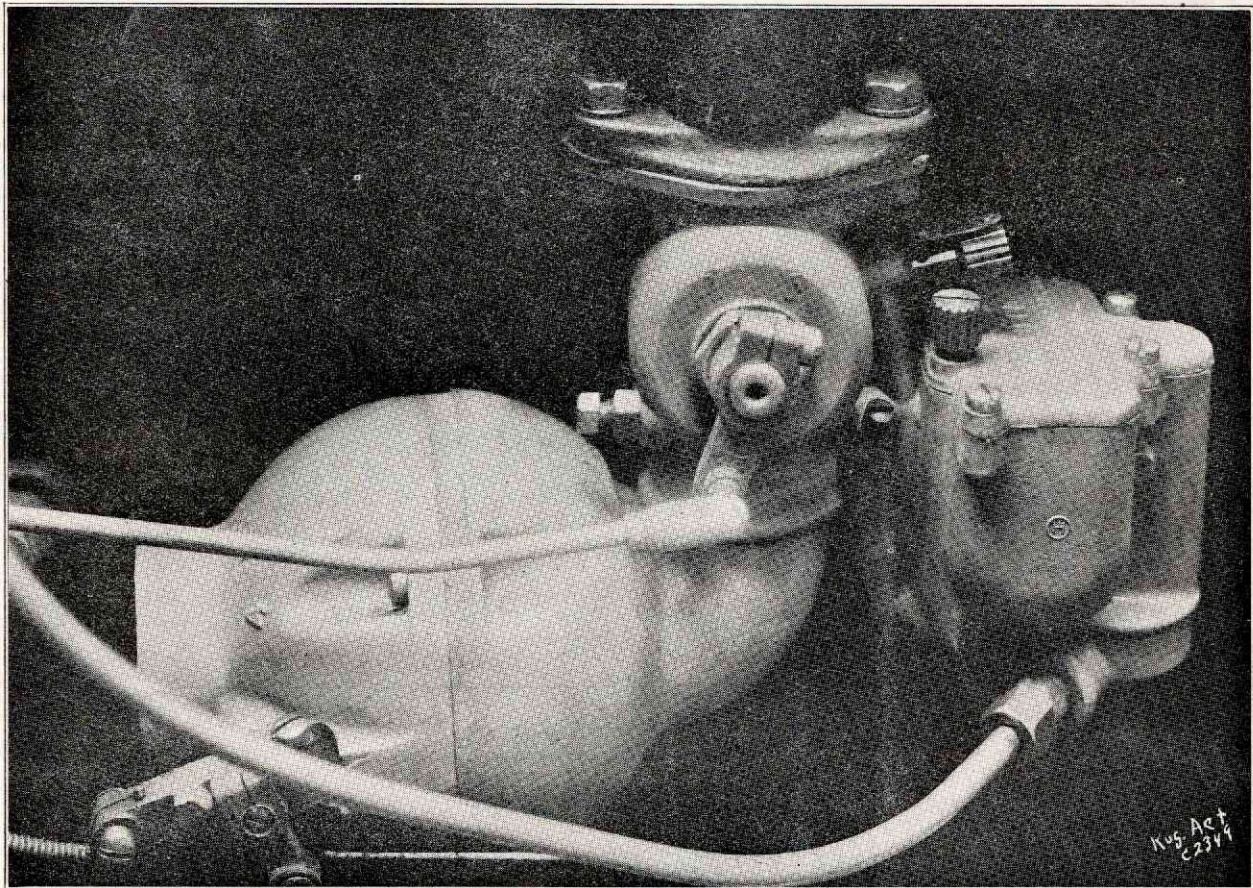
The Throttle Lever is installed on the back of body side.

The Strainer Bowl may be turned to any angle by loosening retaining nut.

Equipment 441

Ford Model A

LIST PRICE \$23.00



DIRECTIONS FOR INSTALLATION

Examine the illustration above before you start.
The following method of procedure is recommended:

- 1—Remove the carburetor.
- 2—Bolt Winfield to the manifold as shown above. Use the new gasket that is furnished. Be sure and use a thin gasket, preferably the gasket furnished with this installation. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange, and this warpage will cause an air leak that results in poor idling and poor low speed performance. Above all, **never use shellac or any other preparation on the gasket.**
- 3—The foot throttle arm is connected to the original rod on the outside. Make sure that the throttle on the carburetor opens to wide-open position when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this: have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop, you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop full power and speed.
- 4—Connect up the gasoline line. Use the original line and the gas fitting that is furnished.
- 5—Install the silencer and choke in the usual manner. The choke control is connected to the arm and holder assembled on the silencer by means of the new wire dash control that is furnished. In making this hook-up, be sure that the choke on the dash is pushed all the way in before you make your setting. And when the dash choke is fully pushed in, make sure that the choke valve in the silencer is wide open. And see that the choke valve is fully closed when the choke control on the dash is pulled out. A partially opened choke when the dash control is pulled clear out will result in very hard starting. A partially closed choke after the motor is warmed up will ruin the gas mileage.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed of the motor may be obtained by unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment.

OTHER ADJUSTMENTS—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clock-wise direction to about 16 notches. The following is a good way to obtain an exact adjustment. Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needle in a counter clockwise direction to about 18 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you feel maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that the ignition should be in first-class shape to get the best

results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire—there is more resistance. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

1—Check the spark plug clearance. The proper clearance may be had by consulting the instruction book for this car. The Ford should have not more than .032.

2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.

3—The coil may be weak. Test the coil or try a new one.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the valves and spark plugs.

1—Check the compression on each cylinder using the hand crank.

2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

1—If the points are pitted, file them smooth or install a new set.

2—The gap on the distributor points should be between .015 and .018, or it will not make a good contact at high speeds.

Equipment 441 FORD MODEL A

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer.....	2.50
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	1011—Throttle Lever Assembly75
1.....	1012—Choke Dash Control	1.25
1.....	57-A-1—Gas Fitting25
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		\$23.00

This Carburetor is installed on the right hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped 5-16" U. S. S.

The Silencer points to the rear with the Cable Holder next to the frame and back.

The Throttle Lever is installed on the back of the body side and is connected with the original Throttle Rod.

The Choke is connected by means of Wire Dash Control furnished. This is assembled in the same plan as the original Choke Rod.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 442

Durant 55

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer.....	2.50
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder50
1.....	33-B-3—Throttle Lever50
1.....	33-B-5—Throttle Lever50
1.....	57-D-1—Gas Fitting25
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		\$22.00

This Carburetor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped 5-16" U. S. S.

The Silencer points to the rear with the Cable Holder on top and pointing to the rear.

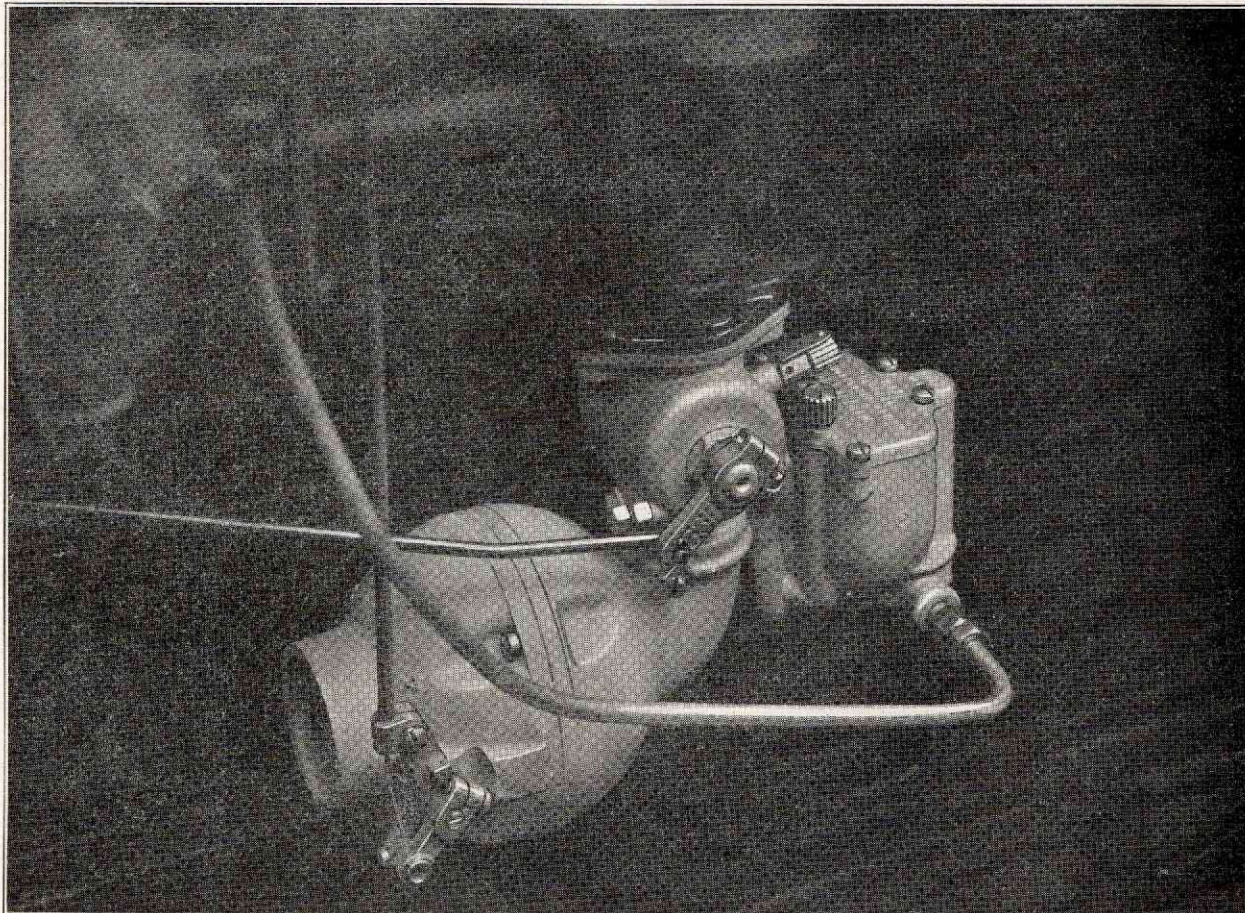
The Foot Throttle Lever, 33-B-3, is installed on the back of body side.

The Hand Throttle Lever, 33-B-5, is installed on the throttle cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 443 De Soto Six

LIST PRICE \$21.50



DIRECTIONS FOR INSTALLATION

Examine the illustration above before you start.
The following method of procedure is recommended:

- 1—Remove the carburetor and the air cleaner.
- 2—Bolt Winfield to the manifold as shown above. Use the new gasket that is furnished. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange, and this warpage will cause an air leak that results in poor idling and poor low speed performance. Above all, **never use shellac or any other preparation on the gasket.**
- 3—The foot throttle arm is connected to the original rod on the side next to the frame as shown above. Make sure that the throttle on the carburetor opens to wide-open position when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this: have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop, you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop full power and speed.
- 4—Connect up the gasoline line. Use the original line and the original gas fitting.
- 6—Install the silencer and choke in the usual manner. The choke control is connected to the arm and holder assembled on the silencer. In making this hook-up, be sure that the choke on the dash is pushed all the way in before you make your setting. And when the dash choke is fully pushed in, make sure that the choke valve in the silencer is wide open. And see that the choke valve is fully closed when the choke control on the dash is pulled out. A partially opened choke when the dash control is pulled clear out will result in very hard starting. A partially closed choke after the motor is warmed up will ruin the gas mileage.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed of the motor may be obtained unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment.

OTHER ADJUSTMENT—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clock-wise direction to about 18 notches. The following is a good way to obtain an exact adjustment. Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needle in a counter clockwise direction to about 22 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you feel maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that the ignition should be in first-class shape to get the best

results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire—there is more resistance. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

1—Check the spark plug clearance. If the car is equipped with the regular silver dome head, the proper clearance is .028. If the car is equipped with the special Red Head (High Compression Head), the proper clearance is .025.

2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.

3—The coil may be weak. Test the coil or try a new one.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the valves and spark plugs.

1—Check the compression on each cylinder using the hand crank.

2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

1—If the points are pitted, file them smooth or install a new set.

2—The gap on the distributor points should be between .015 and .018, or it will not make a good contact at high speeds.

Equipment 443

DE SOTO SIX

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer.....	2.50
1.....	36-B-1—Choke Lever75
1.....	38—Cable Holder50
1.....	33-B-7—Throttle Lever50
1.....	57-A-1—Gas Fitting25
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		\$21.50

This Carburetor is installed on the right hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped 5-16" U. S. S.

The Silencer points to the rear with the Cable Holder next to the frame.

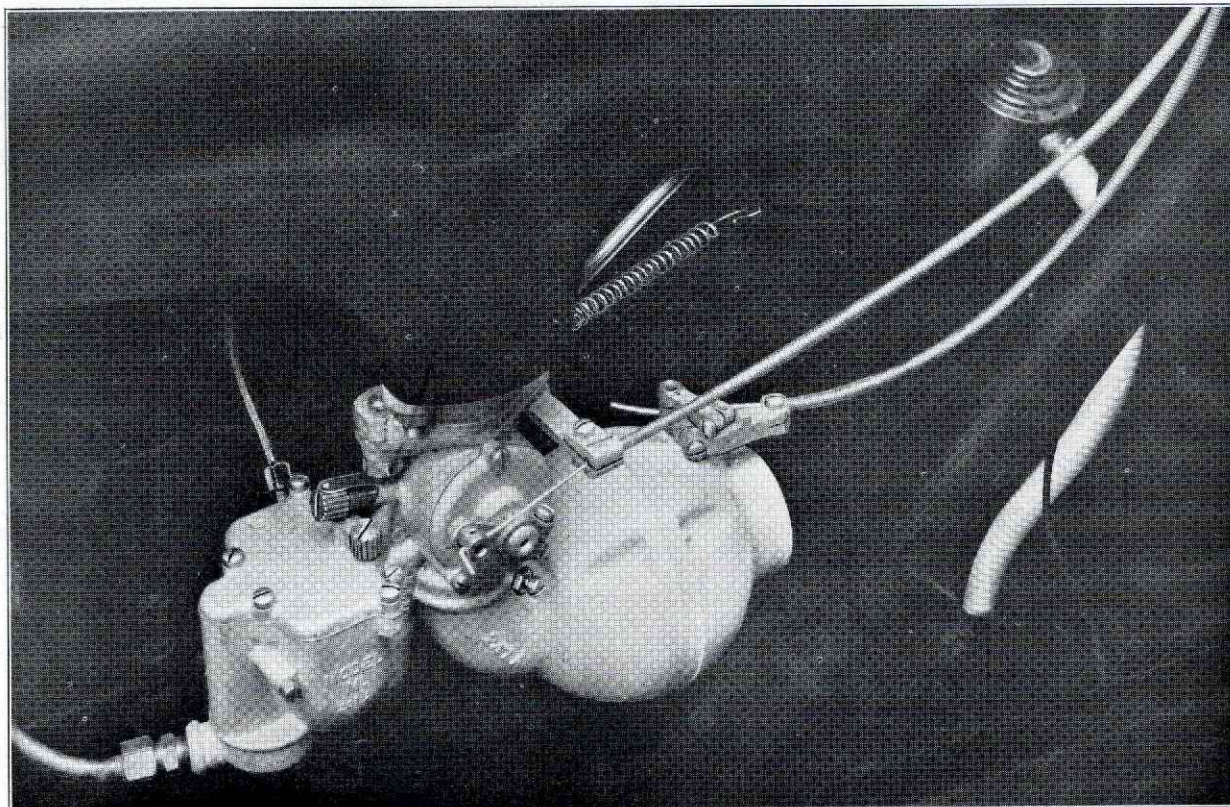
The Throttle Lever is installed on the back of body side—that is, on the side next to the frame.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 444

Chevrolet Six 1929

LIST PRICE \$24.25



SHOWS INSTALLATION WITHOUT CRANKCASE VENTILATOR ADAPTER

DIRECTIONS FOR INSTALLATION

Examine the illustration above before you start.
The following method of procedure is recommended:

- 1—Remove the carburetor, the air cleaner, and crankcase ventilator. Discard this ventilator tubing.
- 2—Bolt Winfield to the manifold as shown above. Use the two new gaskets that are furnished. If you have to bolt the special flange and carburetor together, be sure and use a thin gasket, preferably the gasket furnished with this installation. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange, and this warpage will cause an air leak that results in poor idling and poor low speed performance. Above all, **never use shellac or any other preparation on the gasket.**
- 3—The hand throttle cable holder should be placed under the rear manifold stud. The throttle arm should be adjusted as far forward as possible, so that the hand throttle cable wire will not bind at full opening of the throttle.
- 4—The foot throttle arm is connected to the original rod next to the motor. Make sure that the throttle on the carburetor opens to wide-open position when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this: have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop, you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop full power and speed.
- 5—Connect up the gasoline line. Use the original line and the original gas fitting.
- 6—Install the silencer and choke in the usual manner. The choke control is connected to the arm and holder assembled on the silencer. In making this hook-up, be sure that the choke on the dash is pushed all the way in before you make your setting. And when the dash choke is fully pushed in, make sure that the choke valve in the silencer is wide open. And see that the choke valve is fully closed when the choke control on the dash is pulled out. A partially opened choke when the dash control is pulled clear out will result in very hard starting. A partially closed choke after the motor is warmed up will ruin the gas mileage.
- 7—Fasten the Crankcase Ventilator Adapter on to the throat of the silencer. Insert the flexible tubing in the drilled part of the adapter.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed of the motor may be obtained by unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment.

OTHER ADJUSTMENT—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clockwise direction to about 18 notches. The following is a good way to obtain an exact adjustment. Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needle in a counter-clockwise direction to about 20 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you feel maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that the ignition should be in first-class shape to get the best

results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire—there is more resistance. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

1—Check the spark plug clearance. The proper clearance may be had by consulting the instruction book for this car. The Chevrolet should have not more than .030.

2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.

3—The coil may be weak. Test the coil or try a new one.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the valves and spark plugs.

1—Check the compression on each cylinder using the hand crank.

2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

1—If the points are pitted, file them smooth or install a new set.

2—The gap on the distributor points should be between .015 and .018, or it will not make a good contact at high speeds.

Equipment 444 CHEVROLET SIX 1929

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer.....	2.50
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-3—Throttle Lever .....	.50
1.....	33-C-11—Throttle Lever .....	.75
1.....	54-H—Flexible Tubing .....	.25
1.....	1052—Throttle Lever Cable Holder.....	.25
1.....	77—Flange, including 1-62A, 2-63A1, 2-64A3	1.00
1.....	1079—Crankcase Ventilator Adapter .....	.75

\$24.25

This Carburetor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped 5-16" U. S. S.

The Silencer points to the rear with the Cable Holder next to the frame.

The 33-B-3 Throttle Lever is installed on the back of body side.

The 33-C-11 Throttle Lever is installed on the Throttle Cover side.

The No. 1052 Throttle Lever Cable Holder is installed under rear stud of flange for hand throttle control.

The Flexible Tubing is connected to crankcase ventilator adapter No. 1079.

The Strainer Bowl may be turned to any angle by loosening retaining nut.

Equipment 445

Willys-Knight 70-B

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer.....	2.50
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-3—Throttle Lever .....	.50
1.....	33-B-10—Throttle Lever .....	.75
1.....	57-D-1—Gas Fitting .....	.25
		\$22.25

This Carburetor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped 5-16" U. S. S.

The Silencer points to the back with the Cable Holder next to the frame.

The 33-B-3 Throttle Lever is installed on the back of body side.

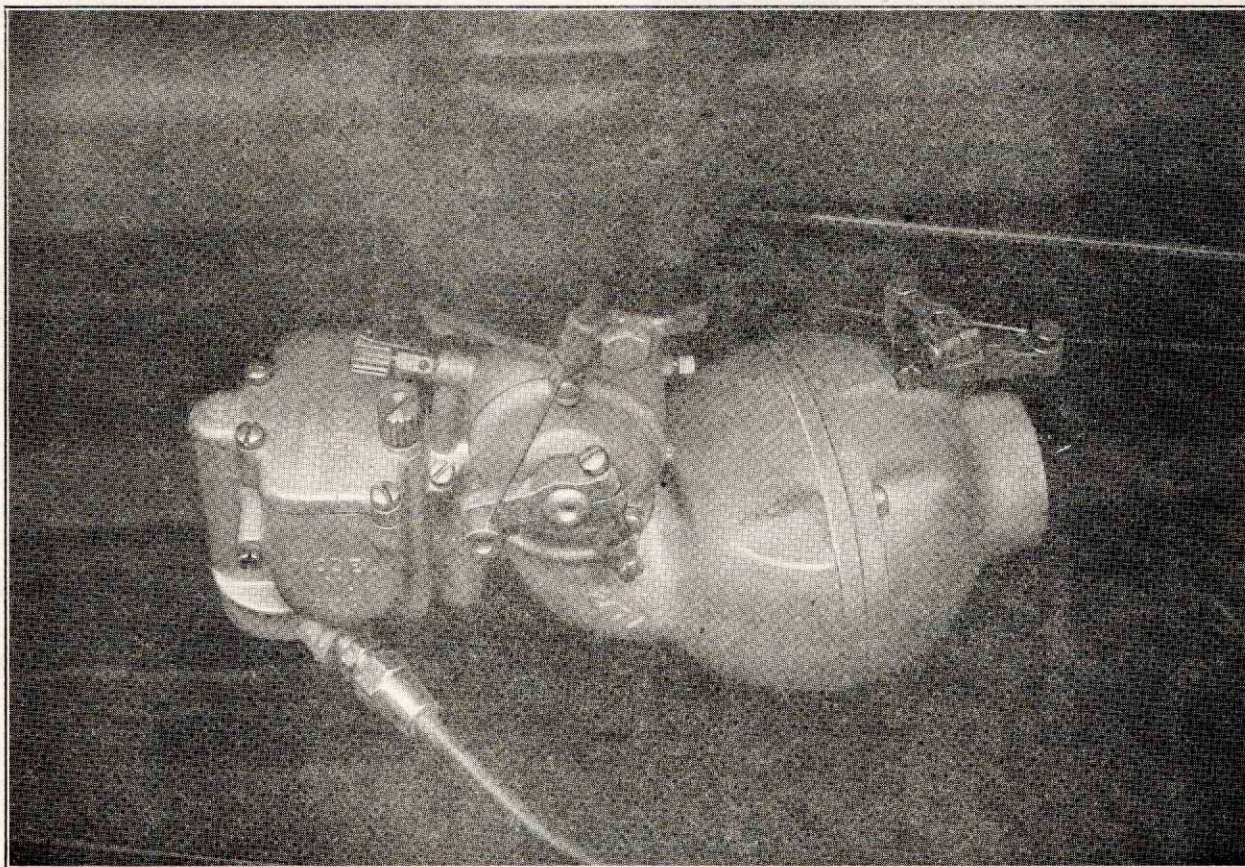
The 33-B-10 Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 446

Whippet 6, 1929

LIST PRICE \$22.25



DIRECTIONS FOR INSTALLATION

Examine the illustration above before you start.

The following method of procedure is recommended:

- 1—Remove the carburetor and the air cleaner.
- 2—Bolt Winfield to the manifold as shown above. Use the new gasket that is furnished. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange, and this warpage will cause an air leak that results in poor idling and poor low speed performance. Above all, **never use shellac or any other preparation on the gasket.**
- 3—The hand throttle cable holder should be turned to the front as per illustration. The throttle arm should be adjusted as far forward as possible, so that the hand throttle cable wire will not bind at full opening of the throttle.
- 4—The foot throttle arm is connected to the original rod next to the motor. Make sure that the throttle on the carburetor opens to wide-open position when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this: have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop, you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop full power and speed.
- 5—Connect up the gasoline line. Use the original line and the new gas fitting that is furnished.
- 6—Install the silencer and choke in the usual manner. The choke control is connected to the arm and holder assembled on the silencer. In making this hook-up, be sure that the choke on the dash is pushed all the way in before you make your setting. And when the dash choke is fully pushed in, make sure that the choke valve in the silencer is wide open. And see that the choke valve is fully closed when the choke control on the dash is pulled out. A partially opened choke when the dash control is pulled clear out will result in very hard start-in. A partially closed choke after the motor is warmed up will ruin the gas mileage.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed of the motor may be obtained unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment.

OTHER ADJUSTMENT—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clock-wise direction to about 20 notches. The following is a good way to obtain an exact adjustment. Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needle in a counter clockwise direction to about 22 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you feel maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that the ignition should be in first-class shape to get the best

results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire—there is more resistance. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

- 1—Check the spark plug clearance. The proper clearance may be had by consulting the instruction book for this car. The Whippet should have not more than .030.
- 2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.
- 3—The coil may be weak. Test the coil or try a new one.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the valves and spark plugs.

- 1—Check the compression on each cylinder using the hand crank.
- 2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

- 1—If the points are pitted, file them smooth or install a new set.
- 2—The gap on the distributor points should be between .015 and .018, or it will not make a good contact at high speeds.

Equipment 446

WHIPPET 6, 1929

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer.....	2.50
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-3—Throttle Lever .....	.50
1.....	33-B-10—Throttle Lever .....	.75
1.....	57-D-1—Gas Fitting .....	.25
		<hr/>
		\$22.25

This Carburetor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped 5-16" U. S. S.

The Silencer points to the back with the Cable Holder up.

The 33-B-3 Throttle Lever is installed on the back of body side.

The 33-B-10 Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 447

Erskine 6, 1929

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer	2.50
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
2.....	33-B-3—Throttle Levers	1.00
1.....	34-A-1—Slip Joint .....	.25
1.....	34-B-1—Slip Joint Clamp .....	.25
1.....	47-F-1—Throttle Rod .....	.25
1.....	57-D-1—Gas Connection .....	.25
1.....	114—Choke Dash Control	1.75
		<hr/>
		\$24.50

This Carburtor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped 5-16" U. S. S.

The Silencer points to the back with the Cable Holder next to the frame.

The 33-B-3 Throttle Lever is installed on the back of body side.

The 33-B-3 Throttle Lever with Slip Joint is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 448

Durant 40-60-65

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer.....	2.50
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-3—Throttle Lever .....	.50
1.....	33-A-2—Throttle Lever .....	.50
1.....	57-D-1—Gas Fitting .....	.25
		<hr/>
		\$22.00

This Carburetor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped 5-16" U. S. S.

The Silencer points to the rear with the Cable Holder next to the frame.

The 33-B-3 Throttle Lever is installed on the body side.

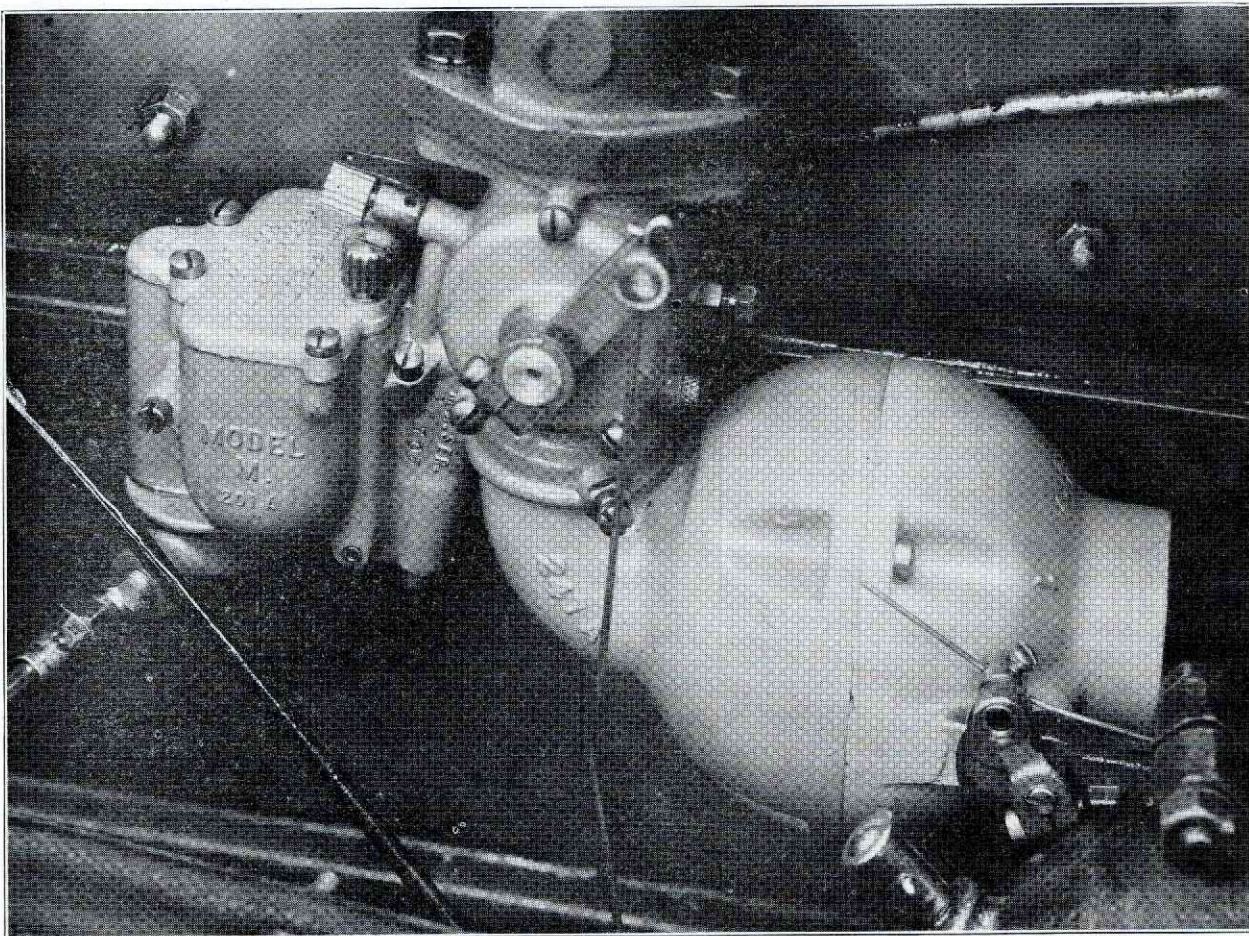
The 33-A-2 Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 448

Durant 40-60-65

LIST PRICE \$22.00



SHOWS INSTALLATION ON 1929 DURANT 40

DIRECTIONS FOR INSTALLATION

Examine the illustration above before you start.
The following method of procedure is recommended:

- 1—Remove the carburetor and the air cleaner.
- 2—Before you install the carburetor, follow this procedure. Bend the original foot throttle rod away for the valve cover so that it will have plenty of clearance. Then attach the throttle lever arm to the foot throttle rod. Then install the throttle lever arm on the carburetor before you bolt Winfield to the manifold.
- 3—Bolt Winfield to the manifold as shown above. Use the new gasket that is furnished. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange, and this warpage will cause an air leak that results in poor idling and poor low speed performance. Above all, **never use shellac or any other preparation on the gasket.**
- 4—The foot throttle arm is connected to the original rod on the side next to the motor as shown above. Make sure that the throttle on the carburetor opens to wide-open position when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this: have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop,

you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop power and speed.

- 5—Attach the original hand throttle control to the throttle arm which is installed on the throttle cover side of the carburetor. Note the illustration.
- 6—Connect up the gasoline line. Use the original line and the gas fitting that is furnished.
- 7—Install the silencer and choke in the usual manner. The choke control is connected to the arm and holder assembled on the silencer.

CAUTION—With the choke on the instrument panel pushed "in," the choke butterfly should be inspected to see that it is wide open. A partially closed choke after the motor is warmed up will ruin the gas mileage. Also, inspect the butterfly valve to see that it closes tightly when the choke button is pulled out for starting, because if the choke is but partially opened, starting may be difficult.

- 8—Start the motor. While it is idling, oil both sides of the throttle shaft at the throttle bearings. Use ordinary engine oil.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed of the motor may be obtained by unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment. Set the idling speed fast enough so there is no tendency for the motor to die when the throttle is closed quickly.

OTHER ADJUSTMENT—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clockwise direction to about 16 notches. The following is a good way to obtain an exact adjustment. Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needle in a counter clockwise direction to about 20 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you feel maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that the ignition should be in first-class shape to get the best results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire—there is more resistance. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

1—Check the spark plug clearance. The proper clearance is .025.

2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.

3—The coil may be weak. Test the coil or try a new one.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the valves and spark plugs.

1—Check the compression on each cylinder using the hand crank.

2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

1—If the points are pitted, install a new set.

2—The gap on the distributor points should be .020, or it will not make a good contact at high speeds.

Equipment 448

DURANT 40 - 60 - 65

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer.....	2.50
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-3—Throttle Lever .....	.50
1.....	33-A-2—Throttle Lever .....	.50
1.....	57-D-1—Gas Fitting .....	.25
		<hr/>
		\$22.00

This Carburetor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped 5-16" U. S. S.

The Silencer points to the rear with the Cable Holder next to the frame.

The 33-B-3 Throttle Lever is installed on the body side next to the motor.

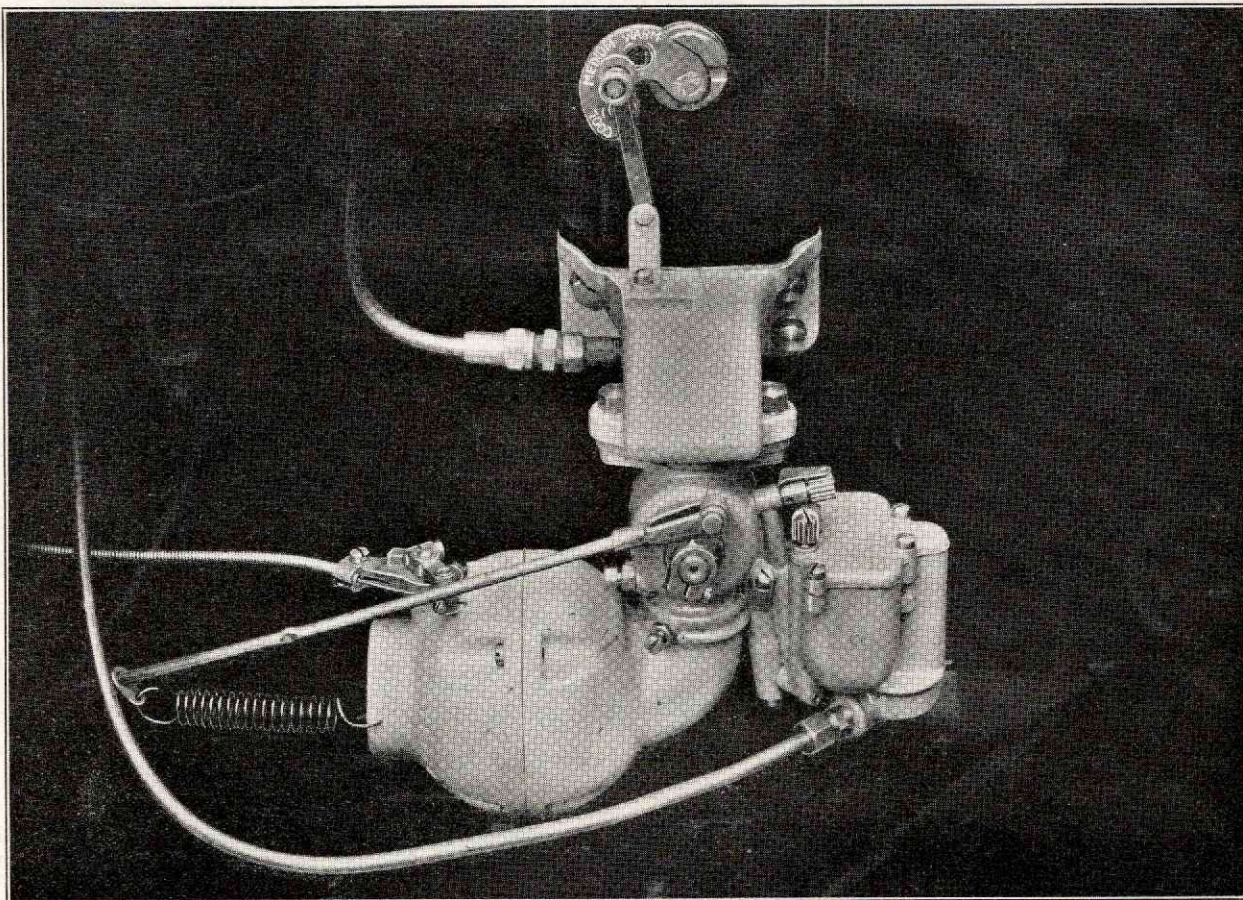
The 33-A-2 Throttle Lever is installed on the Throttle Cover side toward the frame.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 449

Essex Challenger, 1929

LIST PRICE \$25.00



DIRECTIONS FOR INSTALLATION

The Winfield installation on the New Essex is simple and easy. Examine the illustration above before you start. You can save time by performing the various operations as follows:

- 1—Remove the old hot spot elbow and carburetor all in one unit. You do not need to unbolt the carburetor from the hot spot elbow in order to get it out.
- 2—Take off the old throttle rod and discard it. Use the special throttle rod enclosed in the package equipment.
- 3—Remove the old gasoline line and discard it. Use the new line that is in the package equipment.
- 4—Install the carburetor as a unit. That is, bolt the carburetor and hot-spot elbow together, using the thin gasket furnished with this package equipment. Then take this assembled unit of carburetor and hot-spot elbow and mount it on the motor using the old original copper gasket.
- 5—Connect up the new throttle rod and the new gas line. Both of these equipments are furnished in the package. Make sure that the throttle on the carburetor opens up to wide-open position when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this: Have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop, you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop full power and speed.
- 6—The spring which holds the tension on the throttle rod is fastened into a 3-32" hole that has been drilled in the side of the silencer. If you do not have a silencer with the hole already drilled, you can hook the end of the spring into one of the screw holes in the middle of the silencer.
- 7—Install the silencer and choke in the usual manner. In making this hook-up, be sure that the choke on the dash is pushed all the way in before you make your setting. And when the dash choke is fully pushed in, make sure

GASKET INFORMATION. When installing a Winfield, always use a very thin gasket. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange, and this warpage will cause an air leak that results in poor idling and poor low speed performance. Above all, **never use shellac or any other preparation on the gasket.**

DIRECTIONS FOR ESSEX INSTALLATION—EQUIPMENT 449—(Continued)

that the choke valve in the silencer is wide open. And see that the choke valve is fully closed when the choke control on the dash is pulled out. A partially opened choke when the dash control is pulled clear out will result in very hard starting. A partially closed choke after the motor is warmed up will ruin the gas mileage.

8—HEAT CONTROL. Connect the heat control rod to the special bracket on our hot-spot elbow. For average driving conditions, the heat control should be set on medium as shown in the illustration above. For summer driving, the heat control should be set at cool; for winter driving, it should be set at hot. Note: Tell the owner of the car how to make these settings so that he will know how to do it himself.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed may be obtained by unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment.

OTHER ADJUSTMENTS—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clock-wise direction to about 18 notches. The following is a good way to obtain an exact adjustment. Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needles in a counter clockwise direction to about 20 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you feel

maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that the ignition should be in first-class shape to get the best results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

- 1—Check the spark plug clearance. The proper clearance may be had by consulting the instruction book for this car. The Essex should have not more than .028.
- 2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

2—The coil may be weak. Test the coil or try a new one.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the valves and spark plugs.

- 1—Check the compression on each cylinder using the hand crank.
- 2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

- 1—If the points are pitted, file them smooth or install a new set.
- 2—The gap on the distributor points should be between .015 and .018, or it will not make a good contact at high speeds.

Equipment 449

ESSEX CHALLENGER 1929

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Comb. Choke and Silencer.....	2.50
1.....	38—Cable Holder .....	.50
1.....	36-B-1—Choke Lever .....	.75
1.....	33-B-1—Throttle Lever .....	.50
1.....	47-D-7—Throttle Rod .....	.25
1.....	58-A-3—Gas Line Extension	1.00
1.....	1064—Hot Spot Elbow, with 2-65A1.....	2.50
		<hr/>
		\$25.00

This Carburetor is installed on the right hand side of the motor with the float bowl pointing to the front.

The flange on the Carburetor is tapped 5-16" U. S. S.

The Silencer points to the rear with the Cable Holder up.

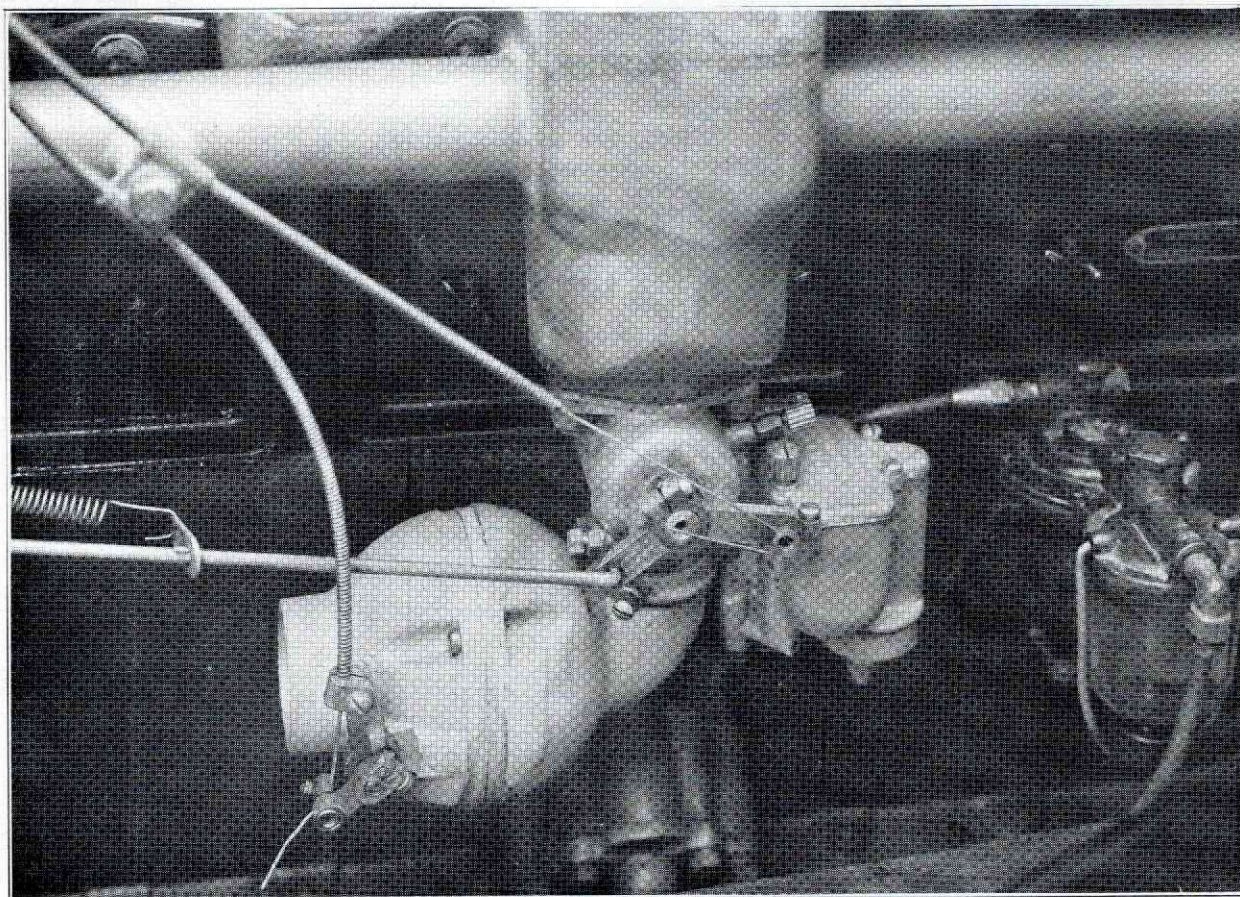
The Throttle Lever is installed on the back of body side.

The Strainer Bowl may be turned to any angle by loosening retaining nut.

Equipment 450

Oakland All American, 1928

LIST PRICE \$22.25



DIRECTIONS FOR INSTALLATION

Examine the illustration above before you start.
The following method of procedure is recommended:

- 1—Remove the carburetor and the air cleaner.
- 2—Bolt Winfield to the manifold as shown above. Use the new gasket that is furnished. When you bolt the carburetor to the manifold be sure to draw up both sides together and with equal pressure. Otherwise, you may warp the carburetor flange.

GASKET INFORMATION. When installing a Winfield always use a very thin gasket. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange, and this warpage will cause an air leak that results in poor idling and poor low speed performance. Above all, **never use shellac or any other preparation on the gasket.**

- 3—The foot throttle arm is connected to the original rod on the side next to the frame as shown above. The hand throttle is connected to the control wire as shown in the illustration. Make sure that the throttle on the carburetor opens to wide-open position when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this:

have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop, you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop full power and speed.

- 4—Connect up the gasoline line. Use the original line and the gas fitting that is furnished.

- 6—Install the silencer and choke in the usual manner. The choke control is connected to the arm and holder assembled on the silencer. In making this hook-up, be sure that the choke on the dash is pushed all the way in before you make your setting. And when the dash choke is fully pushed in, make sure that the choke valve in the silencer is wide open. And see that the choke valve is fully closed when the choke control on the dash is pulled out. A partially opened choke when the dash control is pulled clear out will result in very hard starting. A partially closed choke after the motor is warmed up will ruin the gas mileage.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed of the motor may be obtained unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment.

OTHER ADJUSTMENT—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clock-wise direction to about 18 notches. The following is a good way to obtain an exact adjustment: Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needle in a counter clockwise direction to about 22 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you feel maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that the ignition should be in first-class shape to get the best

results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire—there is more resistance. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

1—Check the spark plug clearance. The proper clearance is .030.

2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.

3—The coil may be weak. Test the coil or try a new one.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the valves and spark plugs.

1—Check the compression on each cylinder using the hand crank.

2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

1—If the points are pitted, file them smooth or install a new set.

2—The gap on the distributor points should be between .015 and .018, or it will not make a good contact at high speeds.

Equipment 450

OAKLAND ALL AMERICAN

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer.....	2.50
1.....	38—Cable Holder .....	.50
1.....	36-B-1—Choke Lever .....	.75
1.....	33-G-2—Throttle Lever	1.00
1.....	57-D-1—Gas Fitting .....	.25
36"	115-3—20 Gauge Piano Wire .....	.25
		<hr/>
		\$22.25

This Carburetor is installed on the right hand side of the motor with the float bowl to the front.

The flange on the Carburetor is drilled 21-64".

The Silencer points to the rear with the Cable Holder next to the frame.

The Throttle Lever is installed on the body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 450

Oakland All American

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	246-A—Combination Choke and Silencer	2.50
1.....	38—Cable Holder .....	.50
1.....	36-B-1—Choke Lever .....	.75
1.....	33-G-2—Throttle Lever	1.00
1.....	57-D-1—Gas Fitting .....	.25
36"	115-3—20 Gague Piano Wire .....	.25
		<hr/>
		\$22.25

This Carburtor is installed on the right hand side of the motor with the Float Bowl to the front.

The flange on the Carburetor is drilled 21-64".

The Silencer points to the rear with the Cable Holder next to the frame.

The Throttle Lever is installed on the body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 451

Dodge Bros. Truck 4 Cyl.

This equipment consists of the following:

1.....	400—MA Body Assembly	\$17.00
1.....	241-A—Choke Elbow Assembly	1.50
1.....	36-B-1—Choke Lever .....	.75
1.....	33-C-2—Throttle Lever .....	.50
1.....	57-D-1—Gas Fitting .....	.25
		<hr/>
		\$20.00

This Carburetor is installed on the right hand side of the motor with the float bowl pointing to the front.

The flange on the Carburetor is drilled 21-64".

The Throttle Lever is installed on the Throttle Cover Side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 501

Standard 1 $\frac{1}{4}$ -Inch Vertical With Silencer

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-A-1—Throttle Lever, (Unless Otherwise specified).....	.50
1.....	57-A-1—Gas Fitting (Unless Otherwise Specified).....	.25
		<hr/>
		\$26.50

This equipment can be installed on any car which uses a 1 $\frac{1}{4}$ " Carburetor where no special adapting flange or other special parts are required, and where there is room for the Silencer.

It will be found quite useful as a stock item where there is a demand for Carburetors for obsolete cars.

Equipment 502

Standard 1 $\frac{1}{4}$ -Inch Vertical

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75	
1.....	241-B—Choke Assembly	1.75	1.75
1.....	36-B-1—Choke Lever .....	.75	
1.....	33-A-1—Throttle Lever (Unless Otherwise Specified) .....	.50	
1.....	57-A-2—Gas Fitting .....	.25	
			\$25.00

This equipment can be installed on any car which uses a 1 $\frac{1}{4}$ " Carburetor where no special adapting Flange or other special parts are required. This equipment can be used in practically all cases for installations on trucks, with the possible exception of the Strainer Bowl being tapped $\frac{1}{4}$ " Pipe instead of $\frac{1}{8}$ " Pipe as in this equipment.

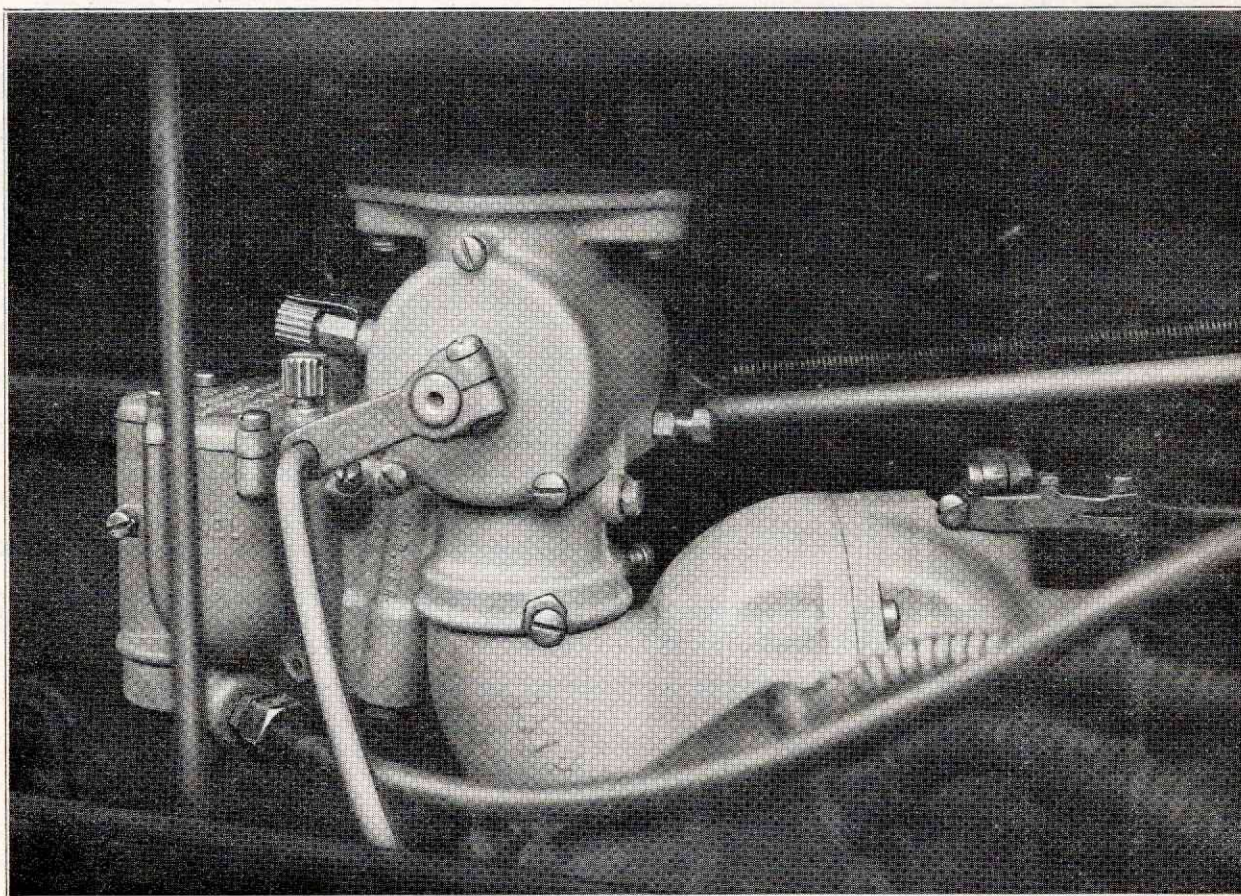
It will be found quite useful as a stock item where there is demand for Carburetors for obsolete cars.

Equipment 503

Auburn 8-77, 1927

Auburn 8-88, 1926

LIST PRICE \$27.00



DIRECTIONS FOR INSTALLATION

Examine the illustration above before you start.
The following method of procedure is recommended:

- 1—Remove the carburetor.
- 2—Bolt Winfield to the manifold as shown above. Use the new gasket that is furnished.
Be sure and use a thin gasket, preferably the gasket furnished with this installation. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange, and this warpage will cause an air leak that results in poor idling and poor low speed performance. Above all, **never use shellac or any other preparation on the gasket.**
- 3—The hand throttle rod is connected to the arm next to the frame as shown in the illustration.
- 4—The foot throttle arm is connected to the original rod next to the motor. Make sure that the throttle on the carburetor opens to wide-open position when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this: have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop, you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop full power and speed.
- 5—Connect up the gasoline line. Use the original line and the gas fitting that is furnished.
- 6—Install the silencer and choke in the usual manner. The choke control is connected to the arm and holder assembled on the silencer. Turn the silencer at a slight angle so as not to interfere with the electric switch on the steering post. In making this hook-up, be sure that the choke on the dash is pushed all the way in before you make your setting. And when the dash choke is fully pushed in, make sure that the choke valve in the silencer is wide open. And see that the choke valve is fully closed when the choke control on the dash is pulled out. A partially opened choke when the dash control is pulled clear out will result in very hard starting. A partially closed choke after the motor is warmed up will ruin the gas mileage.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed of the motor may be obtained by unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment.

OTHER ADJUSTMENTS—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clock-wise direction to about 24 notches. The following is a good way to obtain an exact adjustment. Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needle in a counter clockwise direction to about 32 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you feel maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that the ignition should be in first-class shape to get the best

results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire—there is more resistance. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

1—Check the spark plug clearance. The proper clearance may be had by consulting the instruction book for this car. The Auburn should have not more than .030.

2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.

3—The coil may be weak. Test the coil or try a new one.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the valves and spark plugs.

1—Check the compression on each cylinder using the hand crank.

2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

1—If the points are pitted, file them smooth or install a new set.

2—The gap on the distributor points should be between .015 and .018, or it will not make a good contact at high speeds.

Equipment 503

AUBURN 8-77, (1927), 8-88, (1926)

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-A-5—Throttle Lever .....	.50
1.....	33-A-3—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
		<hr/>
		\$27.00

This Carburetor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points to the back with the Cable Holder on top.

The 33-A-5 Throttle Lever is installed on the back of body side.

The 33-A-3 Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 504

Buick Standard 1926-29

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-A-2—Choke Lever .....	.75
1.....	38-A—Choke Lever Stop .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	58-A-5—Gas Fitting	1.00
1.....	99-B—Flange, including 1 62-B Gasket, 2 63-A-1 Studs, 2 64-A-3 Nuts	2.00
1.....	47-H—Throttle Rod .....	.25
1.....	113-A-2—Throttle Rod Clamp .....	.25
1.....	141-B—Silencer Extension Elbow	1.00
		\$30.75

This Carburetor is installed on the left hand side of the motor with the float bowl pointing to the front.

The Silencer points to the rear with the Choke Lever Stop next to frame.

The Choke Lever Stop points up and slightly to the rear.

The Throttle Lever is on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

The Throttle Rod Clamp is clamped on the foot throttle rod and points down.

Remove the butterfly valve in the manifold passage. This is easily accomplished by using a mirror to locate the two retaining screws in the stem. Do not disturb the balance of the heat mechanism, as this should operate just the same as before.

Equipment 505

Buick E. H. K. and 41-55

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-2—Throttle Lever .....	.50
1.....	57-A-2—Gas Fitting .....	.25
1.....	114—Choke Dash Control	1.75
2.....	63-A-3—Studs	
4.....	64-A-2—Nuts	
		\$28.25

This Carburetor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is drilled 21-64".

The Silencer points to the back with the Cable Holder next to the frame.

The Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 506

Buick 35-38, 1922-1923

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-2—Throttle Lever .....	.50
1.....	57-A-2—Gas Fitting .....	.25
1.....	114—Choke Dash Control	1.75
2.....	63-A-3—Studs	
4.....	64-A-2—Nuts	
		\$28.25

This Carburetor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is drilled 21-64".

The Silencer points to the back with the Cable Holder next to the frame.

The Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned at any angle by loosening retaining nut.

Equipment 507

Chandler Royal 8

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25

\$26.50

This Carburetor is installed on the right hand side of the motor with the float bowl pointing to the rear.

The flange on the Carburetor is drilled 25-64".

The Silencer points to the front with the Cable Holder on top.

The Cable Holder points toward the back.

The Throttle Lever is installed on the back of body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 508

Chandler Big 6, Pikes Peak - 1917 - 1927

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	33-B-3—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
1.....	115-2—Choke Control Tube and Wire.....	.50
		<hr/>
		\$27.50

This Carburetor is installed on the left hand side of the motor with the float bowl pointing to the rear.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points toward the front with the Cable Holder next to the frame.

The Cable Holder points toward the back.

The 33-B-1 Throttle Lever is installed on the Throttle Cover side. The

33-B-3 Throttle Lever is installed on the back of the body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 509

Diana 8

This equipment consist of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-A-1—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
1.....	86-B—Flange, including 2 63-A-1 Studs, 2 64-A-3 Nuts, and 1 62-B Gasket	1.00
		<hr/> \$27.50

This Carburetor is installed on the right hand side of the motor with the float bowl pointing to the front.

The Silencer points to the rear with the Cable Holder next to the frame.

The Throttle Lever is installed on Throttle Cover side.

The Strainer Bowl can be turned to an yangle by loosening retaining nut.

Equipment 510

Chrysler 70

LIST PRICE \$28.00



This equipment 510 consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-7—Throttle Lever .....	.50
1.....	57-A-2—Gas Fitting .....	.25
1.....	87-B-2—Flange, including 2 65-A-2 Cap Screws, 1 62-B Gasket	1.25
1.....	47-E-4—Throttle Rod .....	.25
		<hr/>
		\$28.00

This Carburetor is installed on the right hand side of the motor with the float bowl pointing to the front.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points to the rear with the Cable Holder next to the frame.

The throttle lever is installed on the throttle cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 511

Dodge Senior 6

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	47-J-3—Throttle Rod .....	.50
1.....	87-B-1—Flange, including 2 65-A-2 Cap Screws, 1 62-B Gasket	1.25
		<hr/>
		\$28.00

This Carburetor is installed on the right hand side of the motor with the float bowl pointing to the front.

The Silencer points to the rear with the Cable Holder next to the frame.

The Cable Holder points toward the back.

The 33-B-1 Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 512

Franklin 11-B

FRANKLIN 1929

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	33-B-6—Throttle Lever .....	.50
		<hr/>
		\$26.75

This Carburetor is installed on the left hand side of the motor with the float bowl pointing to the front.

The Carburetor flange is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points to the back with the Cable Holder on the outside.

The 33-B-1 Foot Throttle Lever is installed on the back of body side and the 33-B-6 Hand Throttle Lever is installed on the Throttle Cover side.

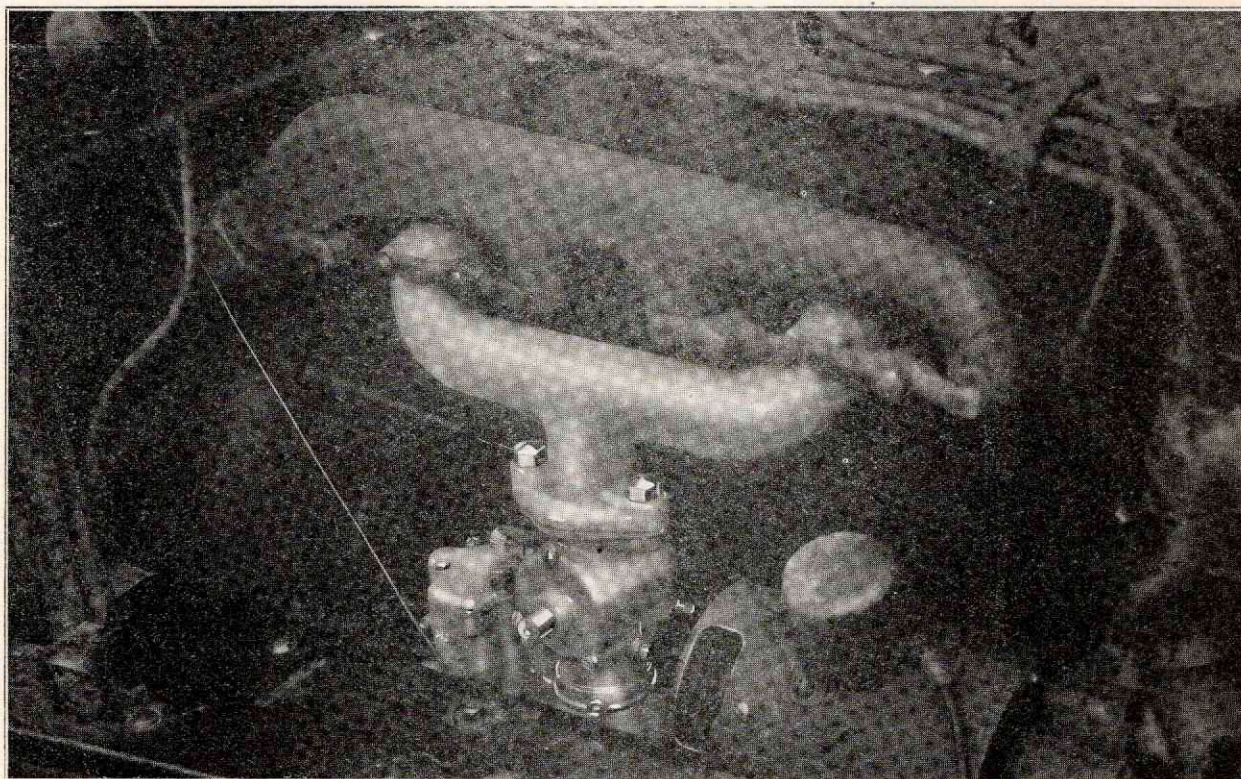
The Strainer Bowl can be turned to any angle by loosening retaining nut. Use the gas fitting from the Franklin car.

Equipment 513

Ford 1¼-Inch Model T

With Manifold

LIST PRICE \$30.00



This equipment 513 consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	241-BF—Choke Assembly	1.75
1.....	36-C-1—Choke Lever .....	.75
1.....	33-B-3—Throttle Lever .....	.50
1.....	57-A-1—Gas Fitting .....	.25
1.....	66-B—Manifold, including 2 65-A-2 Cap Screws and 1 62-B Gasket	5.00
		<hr/> \$30.00

This Carburetor is installed on the right hand side of the motor with the float bowl to the back.

The Choke Lever is assembled on the side toward frame.

The Strainer Bowl can be turned to any angle by loosening the retaining nut.

It will be necessary to make a throttle control rod for this installation. A direct connection by a rod passing thru the floor boards will be found to be the simplest and most efficient method of control. This rod should pass thru a hole in the center of the upper floor board about 4" from the brake pedal. Be sure that throttle rod does not come into contact with the magneto plug. A wire control for the hand throttle may be used by fastening a slip joint to the foot throttle rod above the first bend under the floor boards and connecting by means of a wire to the hand control on the steering column.

Equipment 514

Ford Rajo Head

Commercial

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	241-B-F—Choke Assembly	1.75
1.....	36-C-1—Choke Lever .....	.75
1.....	57-A-1—Gas Fitting .....	.25
1.....	96—Flange, including 1 62-B Gasket, 2 63-A-6 Studs, 2 64-A-5 Nuts	2.50
1.....	40—Bell Crank Assembly	1.75
2.....	26—Screws and Nut Assembly	
		<hr/> \$28.75

This Carburetor is installed on the right hand side of the motor with the float bowl to the back.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Bell Crank Assembly is installed toward the front of the motor with Throttle Lever on the throttle cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 515

Gardner 8-80, 8-90

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
2.....	33-B-3—Throttle Levers	1.00
1.....	34-A-1—Slip Joint .....	.25
1.....	34-B-1—Slip Joint Clamp .....	.25
1.....	57-D-2—Gas Fitting .....	.25
1.....	47-F—Throttle Rod .....	.25
		<hr/>
		\$27.75

This Carburetor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points to the back with the Cable Holder next to the frame.

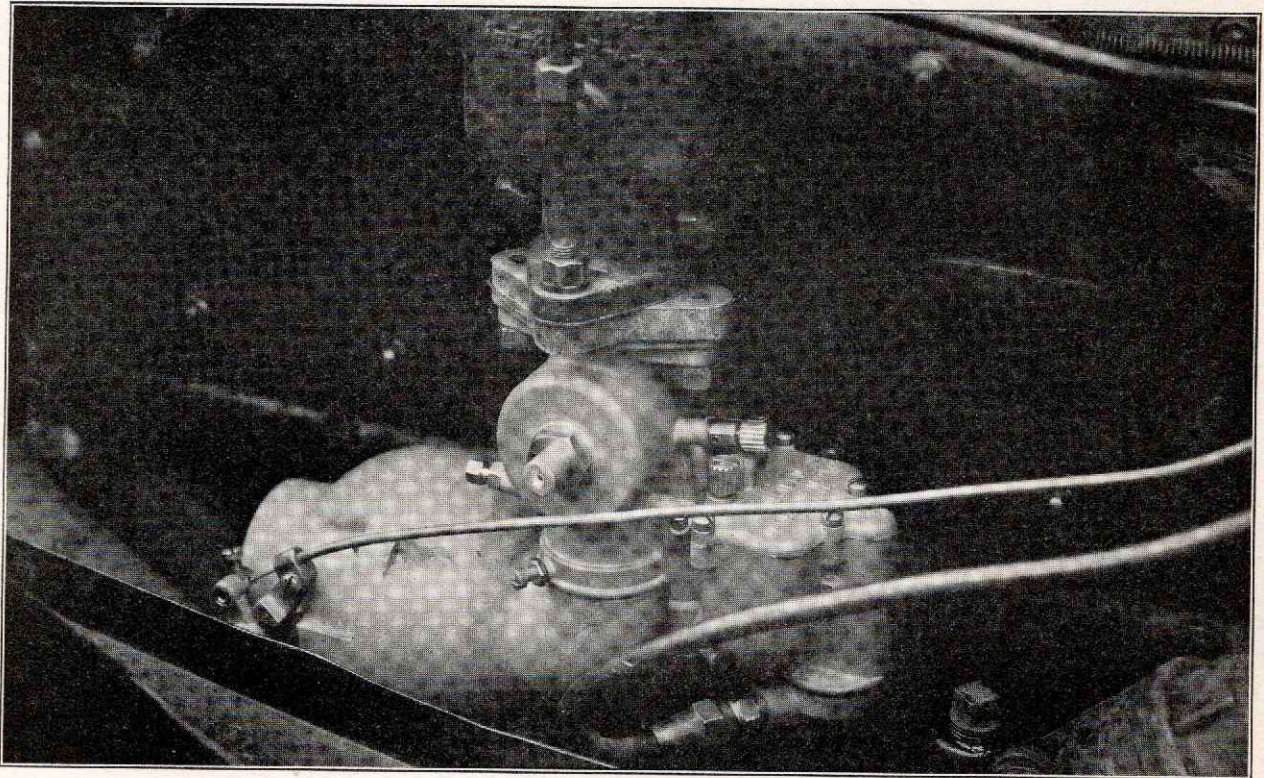
The Strainer Bowl can be turned to any angle by loosening retaining nut.

It will be necessary on this installation to bend the 47-F Throttle Rod so as to clear the Combination Choke and Silencer, using Slip Joint 34-A-1 on the hand throttle lever which is installed on the throttle cover side.

Equipment 516 Hupmobile 8

Prior to 1928

LIST PRICE \$28.50



This equipment 516 consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
1.....	86-B—Flange, including 1 62-B Gasket,	
2.....	63-A-1 Studs, 2 64-A-3 Nuts	1.00
1.....	47-J-4—Throttle Rod .....	.50
1.....	115-2—Choke Control Tube and Wire.....	.50
		<hr/>
		\$28.50

This Carburetor is installed on the left hand side of the motor with the float bowl to the back.

The flange on the Carburetor is drilled 21-64".

The Silencer points to the front with the Cable Holder next to the frame.

The Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 517

Jordan 6 Cylinder, 1924

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-C-4—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
2.....	63-A-3—Studs	
4.....	64-A-2—Nuts	
		<hr/>
		\$26.50

This Carburetor is installed on the right hand side of the motor with the float bowl to the front.

The flange on the Carburetor is drilled 21-64".

The Silencer points to the rear with the Cable Holder next to the frame.

The Cable Holder points toward the rear.

The Throttle Lever is installed on the Throttle cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 518

Jordan 8

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-3—Throttle Lever .....	.25
1.....	57-D-2—Gas Fitting .....	.25
1.....	86-B—Flange, including 1 62-B Gasket, 2 63-A-1 Studs, 2 64-A-3 Nuts	1.00
		<hr/>
		\$27.50

This Carburetor is installed on the right hand side of the motor with the float bowl to the front.

The flange on the Carburetor is drilled 21-64".

The Silencer points toward the rear with the Cable Holder next to the frame.

The Cable Holder points toward the back.

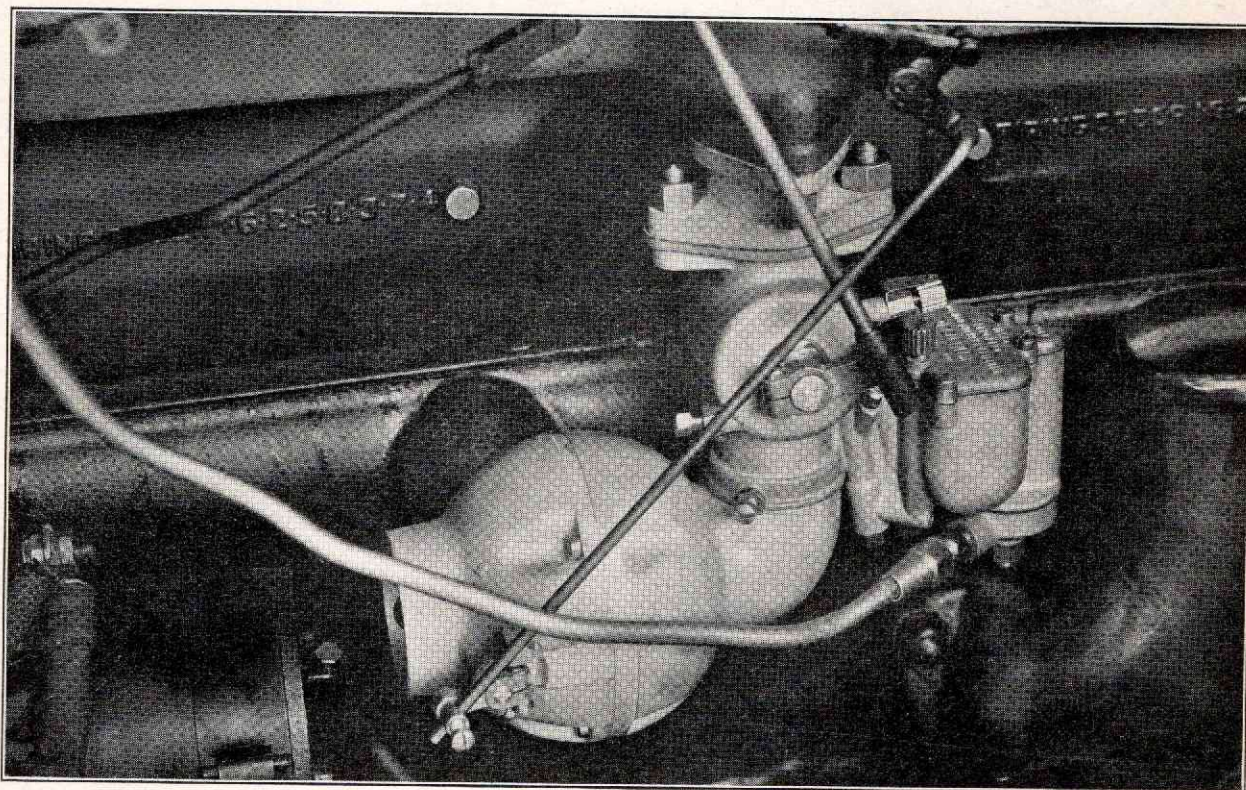
The Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 519

Little Marmon

LIST PRICE \$28.25



This equipment 519 consists of the following:

1.....	500MB Body Assembly.....	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-A-3—Choke Lever .....	.75
1.....	38-A—Choke Lever Stop .....	.50
1.....	33-B-3—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
1.....	47-E-2—Throttle Rod .....	.25
1.....	117-A—Choke Rod .....	.25
1.....	87-B-1—Flange, including 1 62B Gasket,	
	2 65-A-2—Cap Screws	1.25
		<hr/>
		\$28.25

This Carburetor is installed on the right hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points to the rear with the Choke Lever Stop up and slightly forward.

The Throttle Lever is installed on the back of body sheet.

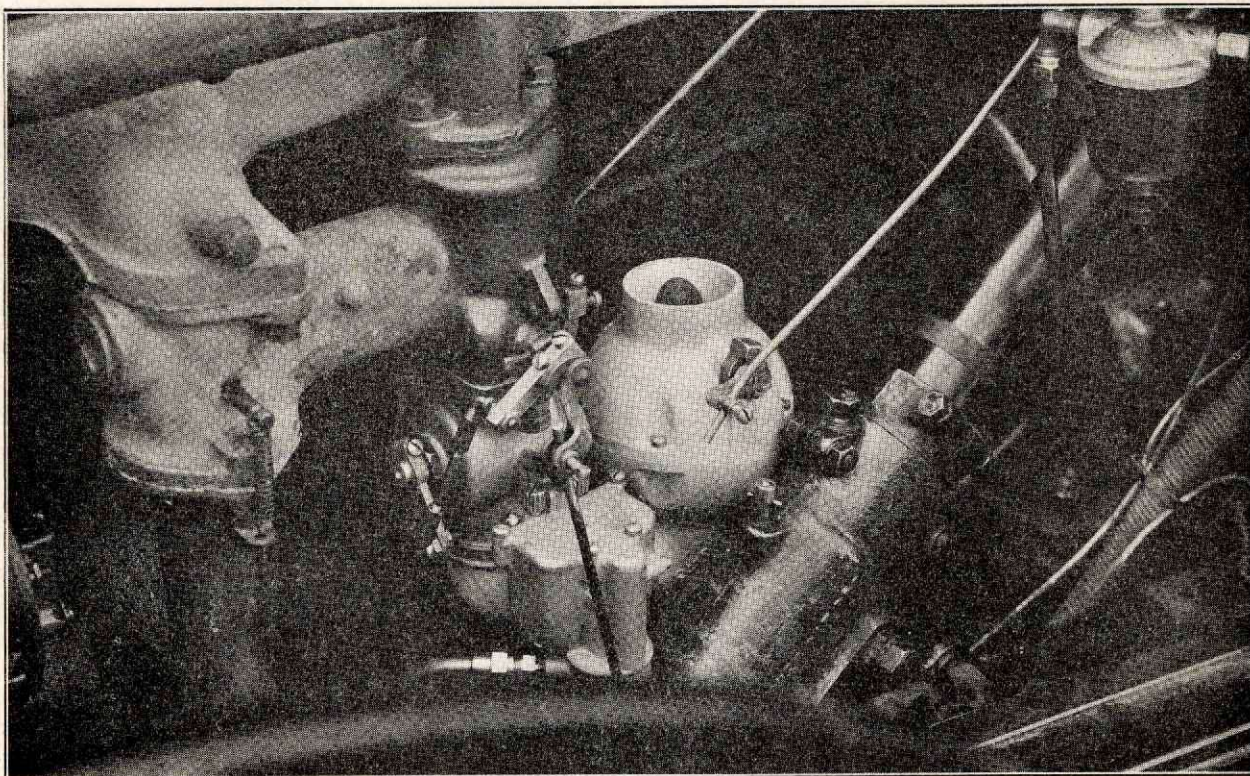
The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 520

Nash Special Six

1927-1929

LIST PRICE \$29.50



DIRECTIONS FOR INSTALLATION

Examine the illustration above before you start.
The following method of procedure is recommended:

- 1—Remove carburetor from heat riser being careful not to disturb the balance of heat or throttle controls. Leave these rods exactly as they are as the Winfield throttle operates off of these original rods.
- 2—Take out throttle valve in the manifold passage by removing the two screws that hold the valve in the stem. This can be done very easily by holding a small mirror under the intake manifold flange for locating the screws.
- 3—Assemble manifold fitting furnished on heat riser using original copper gasket and cap screws.
- 4—Attach the Winfield carburetor (bowl away from motor as illustrated) to the manifold adapter. Use the new gasket that is furnished. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange, and this warpage will cause an air leak that results in poor idling and poor low speed performance. Above all, **never use shellac or any other preparation on the gasket.**
- 5—Install the silencer as shown above. It is necessary to saw off the end of the throttle arm on the cover side of the carburetor so that this arm will not interfere with the silencer.
- 6—Connect the choke rod to the choke arm as shown above. In making this hook-up, be sure that the choke on the dash is pushed all the way in before you make your setting. And when the dash choke is fully pushed in, make sure that the choke valve in the silencer is wide open. And see that the choke valve is fully closed when the choke control on the dash is pulled out. A partially opened choke when the dash control is pulled clear out will result in very hard starting. A partially closed choke after the motor is warmed up will ruin the gas mileage.
- 7—Connect the throttle arm on the carburetor to stem in heat riser using clamp lever and extension rod furnished with this equipment. Note the illustration, carefully.
Make sure that the throttle on the carburetor opens to wide-open position when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this: have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop, you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop full power and speed.
- 8—Connect up the gasoline line. Use the original line and the gas fitting that is furnished.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed of the motor may be obtained unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment.

OTHER ADJUSTMENT—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clockwise direction to about 22 notches. The following is a good way to obtain an exact adjustment. Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needle in a counter clockwise direction to about 28 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you feel maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that the ignition should be in first-class shape to get the best

results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire—there is more resistance. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

- 1—Check the spark plug clearance. The proper clearance may be had by consulting the instruction book for this car. The Nash should have not more than .032.
- 2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.
- 3—The coil may be weak. Test the coil or try a new one.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the valves and spark plugs.

- 1—Check the compression on each cylinder using the hand crank.
- 2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

- 1—If the points are pitted, file them smooth or install a new set.
- 2—The gap on the distributor points should be between .015 and .018, or it will not make a good contact at high speeds.

Equipment 520

NASH SPECIAL SIX 1927-29

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	141-B—Silencer Extension Elbow	1.00
1.....	38-A—Choke Lever Stop .....	.50
1.....	33-A-4—Throttle Lever .....	.50
1.....	36-A-3—Choke Lever .....	.75
1.....	57-D-2—Gas Fitting .....	.25
1.....	47-J-5—Throttle Rod .....	.50
1.....	113-B-2—Throttle Lever Clamp .....	.25
1.....	97-B-1—Flange, including 1 62-C Gasket, 2 63-A-1 Studs, 2 64-A-3 Nuts.....	1.25
2.....	26—Screw and Nut Assembly	

\$29.50

This Carburetor is installed on the left hand side of the motor with the float bowl pointing toward the frame.

The flange on the Carburetor is drilled 21-64".

The Silencer points up with the Choke Lever Stop next to the frame.

The Choke Lever Stop points upward and slightly to the rear.

The Throttle Lever is installed on the back of body side.

The Throttle Lever Clamp, 113-B-2, is clamped to the Marvel Butterfly Shaft and connected to the Winfield Throttle Lever by means of the Throttle Rod, 47-J-5.

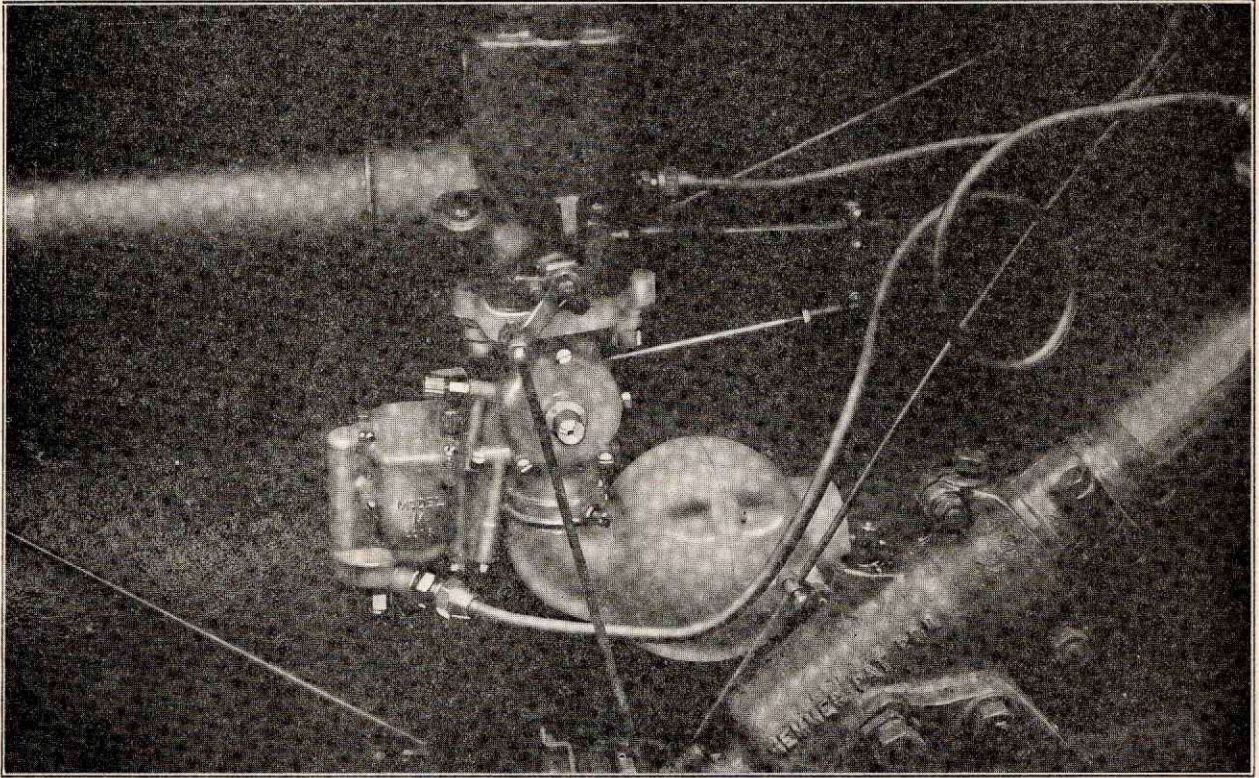
The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 521

Nash Advanced Six

1925-1929

LIST PRICE \$30.75



DIRECTIONS FOR INSTALLATION

Examine the illustration above before you start.
The following method of procedure is recommended:

- 1—Remove the choke rod and discard it.
- 2—Remove carburetor from heat riser being careful not to disturb the balance of heat or throttle controls. Leave these rods exactly as they are as the Winfield throttle operates off of these original rods.
- 3—Take out throttle valve in the manifold passage by removing the two screws that hold the valve in the stem. This can be done very easily by holding a small mirror under the intake manifold flange for locating the screws.
- 4—Assemble manifold adapter fitting furnished on heat riser using original copper gasket and cap screws.
- 5—Bolt Winfield to the adapting flange as shown above. Use the new gasket that is furnished. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange, and this warpage will cause an air leak that results in poor idling and poor low speed performance. Above all, **never use shellac or any other perparation on the gaskez.**
- 6—Attach the throttle rod clamp to the original throttle rod as shown in the illustration. Then connect the foot throttle arm to the clamp with the rod that is furnished. Make sure that the throttle on the carburetor opens to wide-open position when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this: have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop, you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop full power and speed.
- 7—Install the dash control which is furnished.
- 8—Install the silencer and choke in the usual manner. The choke control is connected to the arm and holder assembled on the silencer. In making this hook-up, be sure that the choke on the dash is pushed all the way in before you make your setting. And when the dash choke is fully pushed in, make sure that the choke valve in the silencer is wide open. And see that the choke valve is fully closed when the choke control on the dash is pulled out. A partially opened choke when the dash control is pulled clear out will result in very hard starting. A partially closed choke after the motor is warmed up will ruin the gas mileage.
- 9—Connect up the gasoline line. Use the original line and the gas fitting that is furnished.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed of the motor may be obtained by unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment.

OTHER ADJUSTMENTS—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clock-wise direction to about 22 notches. The following is a good way to obtain an exact adjustment. Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needle in a counter clockwise direction to about 28 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you feel maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that the ignition should be in first-class shape to get the best

results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire—there is more resistance. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

1—Check the spark plug clearance. The proper clearance may be had by consulting the instruction book for this car. The plugs should have not more than .032 clearance.

2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.

3—The coil may be weak. Test the coil or try a new one.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the valves and spark plugs.

1—Check the compression on each cylinder using the hand crank.

2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

1—If the points are pitted, file them smooth or install a new set.

2—The gap on the distributor points should be between .015 and .018, or it will not make a good contact at high speeds.

Equipment 521

NASH ADVANCED SIX 1926-1927

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
1.....	93-B—Flange, including 2 63-A-1 Studs,	
	2 64-A-3 Nuts	2.00
1.....	47-H—Throttle Rod .....	.25
1.....	113-A-3—Throttle Rod Clamp .....	.25
1.....	114—Choke Dash Control	1.75

\$30.75

This Carburetor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is drilled 21-64".

The Silencer points to the rear with the Cable Holder next to the frame.

The Cable Holder points toward the back.

The Throttle Lever is installed on the back of body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 522

Nash 681-691-41, 1924, 4 Cylinder

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	38—Cable Holder .....	.50
1.....	36-B-1—Choke Lever .....	.75
1.....	33-A-1—Throttle Lever .....	.50
1.....	33-B-5—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
1.....	34-A-1—Slip Joint .....	.25
1.....	34-B-1—Slip Joint Clamp .....	.25
2.....	63-A-3—Studs	
4.....	64-A-2—Nuts	
1.....	114—Choke Dash Control	1.75
		\$29.25

This Carburetor is installed on the left hand side of the motor with the float bowl to the back.

The flange on the Carburetor is drilled 21-64".

The Silencer points to the front with the Cable Holder next to the frame.

The 33-B-5 Foot Throttle Lever is installed on the Throttle Cover side.

The 33-A-1 Hand Throttle Lever is installed on the back of body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 523

Paige 6-75, 6-65, Jewett 6

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-A-4—Throttle Lever .....	.50
1.....	47-J-5—Throttle Rod .....	.50
1.....	57-D-2—Gas Fitting .....	.25
		\$27.00

This Carburetor is installed on the right hand side of the motor with the float bowl to the back.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points to the front with the Cable Holder on top.

The Cable Holder points toward the frame and slightly to the rear.

The Throttle Lever is installed on the back of body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 524

Peerless 6-80

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-3—Throttle Lever .....	.50
1.....	33-C-1—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
1.....	86-B—Flange, including 1 62-B Gasket, 2 63-A-1 Studs, 2 64-A-3 Nuts	1.00
1.....	61-B—Throttle Chain .....	.25
1.....	114—Choke Dash Control	1.75
		<hr/>
		\$30.00

This Carburetor is installed on the left hand side of the motor with the float bowl to the back.

The flange on the Carburetor is drilled 21-64".

The Silencer points to the front with the Cable Holder next to the frame.

The Cable Holder points toward the back.

The 33-B-3 Foot Throttle Lever is installed on the Throttle cover side.

The 33-C-1 Hand Throttle Lever is installed on the back of body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 525

Reo Model T

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-C-3—Choke Lever .....	.75
1.....	38-A—Choke Lever Stop .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	57-B-1—Gas Fitting .....	.25
2.....	63-A-3—Studs	
4.....	64-A-2—Nuts	
		<hr/>
		\$26.50

This Carburetor is installed on the right hand side of the motor with the float bowl to the front.

The Carburetor Flange is drilled 21-64".

The Silencer points toward the rear with the Choke Lever at the top.

The Choke Lever Stop points toward the rear.

The Throttle Lever is installed on the cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 526

Reo 4 Speedwagon

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	241-B—Choke Elbow Assembly	1.75
1.....	36-A-3—Choke Lever .....	.75
1.....	33-B-1—Throttle Lever .....	.50
1.....	57-A-2—Gas Fitting .....	.25
2.....	63-A-3—Studs	
4.....	64-A-2—Nuts	
		<hr/>
		\$25.00

This Carburetor is installed on the left hand side of the motor with the float bowl to the rear.

The Carburetor Flange is drilled 21-64".

The Choke Elbow Assembly points to the front with the Choke Lever next to the frame.

The Throttle Lever is installed on the cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 527

Reo Wolverine

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	57-D-1—Gas Fitting .....	.25
1.....	86-B—Flange, including 1 62-B Gasket, 2 63-A-1 Studs, 2 64-A-3 Nuts	1.00
1.....	47-E-4—Throttle Rod .....	.25
		<hr/> \$27.75

This Carburetor is installed on the right hand side of the motor with the float bowl to the front.

The flange on the Carburetor is drilled 21-64".

The Silencer points to the rear with the Cable Holder next to the frame.

The Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 528

Studebaker Special 6

1919-1924

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
2.....	33-A-1—Throttle Levers	1.00
1.....	57-A-2—Gas Fitting .....	.25
1.....	97-B—Flange, including 1 62-C Gasket, 2 63-A-1 Studs, 2 64-A-3 Nuts	1.25
1.....	115-2—Choke Control Tube and Wire.....	.50
		<hr/>
		\$28.75

This Carburetor is installed on the left hand side of the motor with the float bowl toward the front and toward the motor.

The flange on the Carburetor is drilled 21-64".

The Silencer points forward with the Cable Holder next to the frame.

The Foot Throttle Lever is installed on the back of body side.

The Hand Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 529

Studebaker Commander and Chancellor

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
2.....	33-A-1—Throttle Levers	1.00
1.....	57-A-2—Gas Fitting .....	.25
1.....	87-B1—Flange, including 2 65-A-2 Cap Screws, 1 62-B Gasket	1.25
1.....	47-D-1—Throttle Rod .....	.25
		\$28.50

This Carburetor is installed on the left hand side of the motor with the float bowl to the rear.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points forward with the Cable Holder next to the frame.

The Foot Throttle Lever is installed on the Throttle Cover side.

The Hand Throttle Lever is installed on the back of body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 530

Willys-Knight 4

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
1.....	98-A—Elbow, including 1 62-B Gasket and 2 65-A-3 Cap Screws	1.50
1.....	47-D-4—Throtte Rod .....	.25
		\$28.25

This Carburetor is installed on the right hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points to the rear with the Cable Holder next to the frame.

The Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 531

Willys-Knight 66A

LEFT HAND INSTALLATION

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-3—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
1.....	78—Flange, including 2 63-A-8 Studs, 2 64-A-4 Nuts, 1 62-B Gasket	3.00
1.....	47-B-3—Throttle Rod .....	.25
		<hr/>
		\$29.75

This Carburetor is installed on the left hand side of the motor with the float bowl to the rear.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points forward with the Cable Holder on top.

The Cable Holder points toward the rear and toward the motor.

The Throttle Lever is installed on the back of body side.

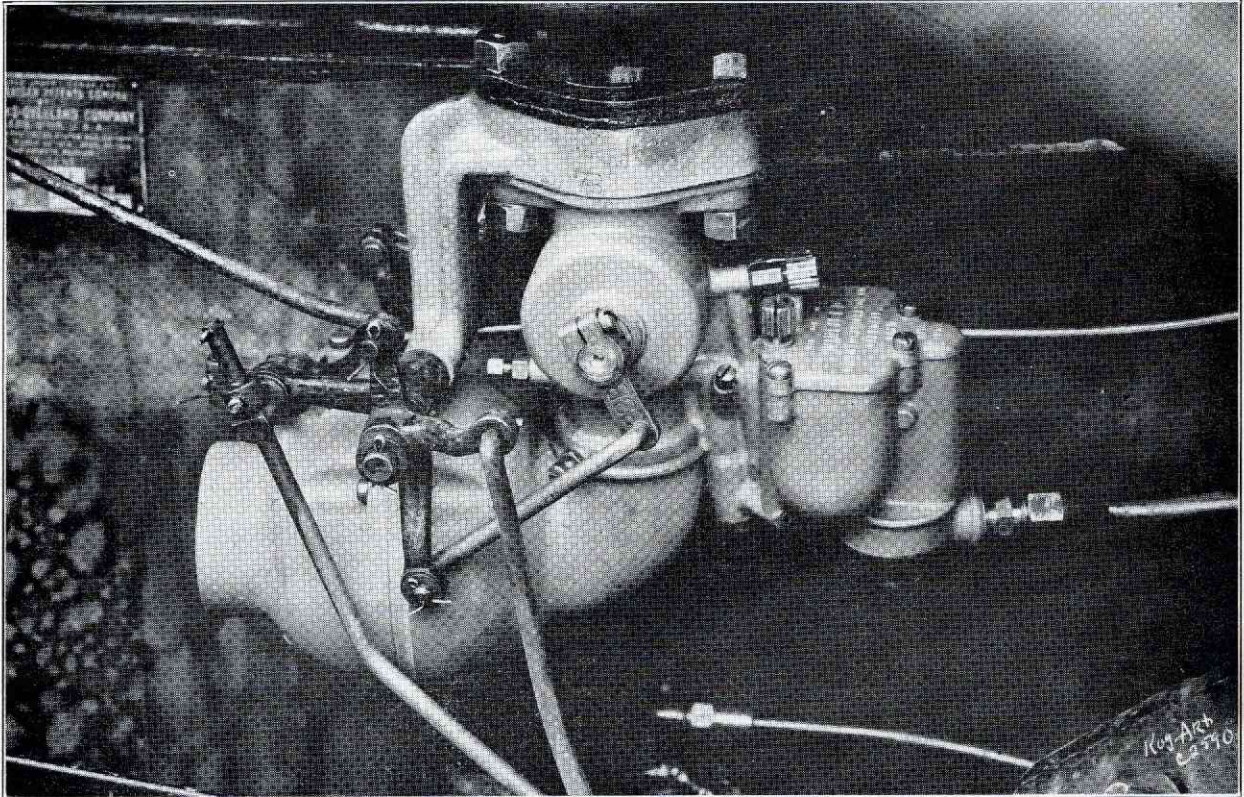
The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 531

Willys-Knight 66-A

LEFT HAND INSTALLATION

LIST PRICE \$30.25



SHOWS INSTALLATION ON A 1927 WILLYS-KNIGHT 66-A

DIRECTIONS FOR INSTALLATION

Examine the illustration above before you start.
The following method of procedure is recommended:

- 1—Remove the Carburetor.
 - 2—Disconnect and remove the oil pump control rod. This rod is no longer needed as the factory recommends the installation of their new automatic oil control which should be installed.
 - 3—Bolt the new adapting flange to the manifold using the original gasket. Connect up the oil rectifier line to tapped hole in new flange. Then bolt Winfield to the flange as shown in the illustration using the new gasket.
- GASKET INFORMATION**—When installing a Winfield, always use a very thin gasket. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange and this warpage will cause an air leak that results in poor idling and poor low speed performance. Above all, **never use shellac or any other preparation on the gasket.**
- 4—Replace original $\frac{3}{8}$ " shaft in new flange together with original bellcrank levers as shown in the illustration. Pin bellcrank lever next to frame to shaft and connect to foot throttle rod. Pin middle bellcrank lever to shaft and connect to handle throttle lever and new throttle rod. Note: Hand throttle lever arm on steering post should be turned up slightly past center toward frame. Connect new throttle rod to new throttle lever on body side of carburetor as shown. Bellcrank lever next to frame is assembled on shaft and connected to original spark

control rods as shown. Connect throttle rod to throttle arm. Make sure that the throttle on the carburetor opens up to wide-open position when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this: Have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop, you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop full power and speed.

- 5—Attach new choke control tube and wire to choke arm on top of silencer, cable holder points toward the motor.

CAUTION—With the choke on the instrument panel pushed "in", the choke butterfly should be inspected to see that it is wide open. A partially closed choke after the motor is warmed up will ruin the gas mileage. Also, inspect the butterfly valve to see that it closes tightly when the choke button is pulled out for starting, because if the choke is but partially opened, starting may be difficult.

- 6—Connect up the gas line to the Carburetor with fitting furnished. Start the Motor. While it is idling, oil both ends of throttle shaft at the throttle bearings. Use ordinary engine oil.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed of the motor may be obtained by unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment. Set the idling speed fast enough so there is no tendency for the motor to die when the throttle is closed quickly.

OTHER ADJUSTMENTS—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clock-wise direction to about 28 notches. The following is a good way to obtain an exact adjustment. Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needle in a counter clockwise direction to about 28 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you feel maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that

the ignition should be in first-class shape to get the best results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire—there is more resistance. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

1—Check the spark plug clearance. The proper clearance may be had by consulting the instruction book for this car. The Willys-Knight should have not more than .030.

2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.

3—The coil may be weak. Test the coil or try a new one.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the compression or spark plugs.

1—Check the compression on each cylinder using the hand crank.

2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

1—If the points are pitted, file them smooth or install a new set.

2—The gap on the distributor points should be .020, or it will not make a good contact at high speeds.

Equipment 531

WILLYS-KNIGHT 66-A LEFT HAND INSTALLATION

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-3—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
1.....	78—Flange, including 2 63-A-7 Studs, 2 64-A-4 Nuts, 1 62-B Gasket.....	3.00
1.....	47-C-2—Throttle Rod .....	.25
1.....	115-4—Choke Control Tube and Wire.....	.50
		<hr/>
		\$30.25

This Carburetor is installed on the left hand side of the motor with the float bowl to the rear.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points forward with the Cable Holder on top.

The Cable Holder points toward the rear and toward the motor.

The Throttle Lever is installed on the back of body side.

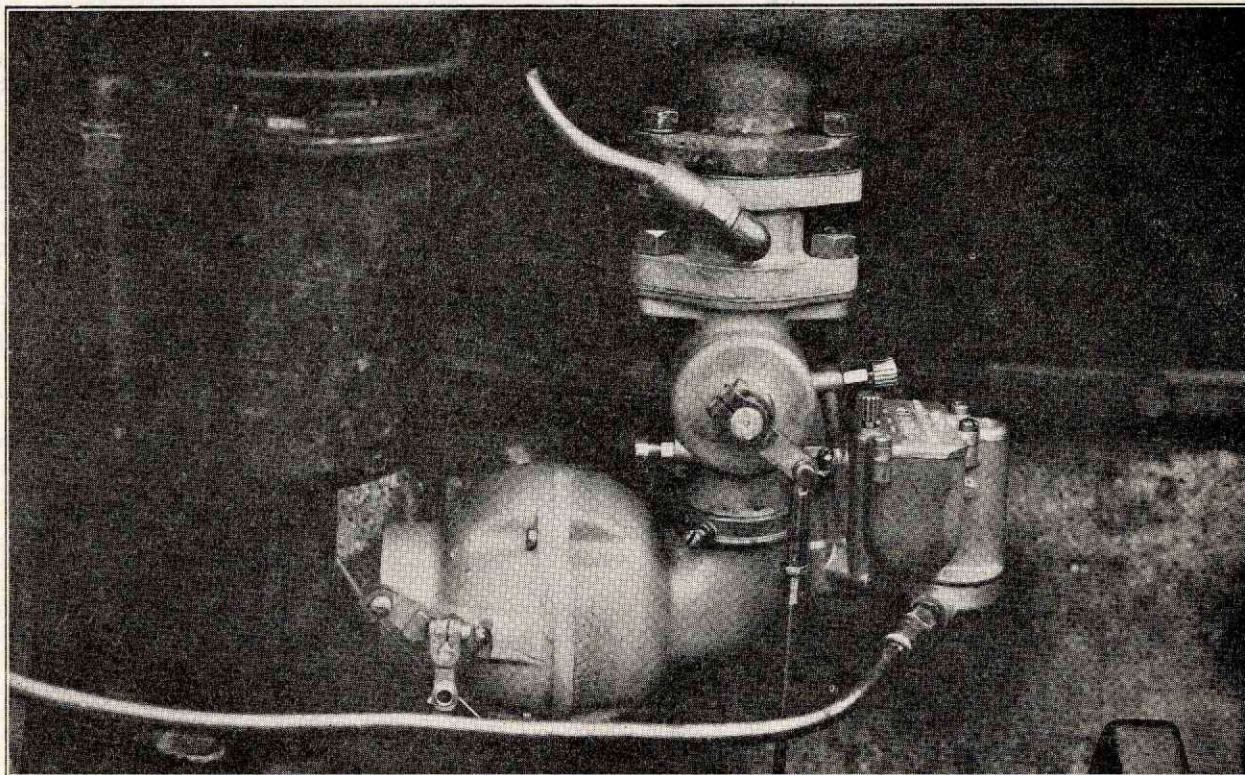
The Strained Bowl can be turned to any angle by loosening retaining nut.

Equipment 532

Willys-Knight 66

RIGHT HAND INSTALLATION

LIST PRICE \$28.75



DIRECTIONS FOR INSTALLATION

Examine the illustration above before you start.
The following method of procedure is recommended:

- 1—Remove the Carburetor.
- 2—Disconnect and remove oil pump control rod. This rod is no longer needed as a new one is supplied with the Winfield equipment.
- 3—Remove the oil rectifier elbow fitting from the old carburetor as this is not needed in the Winfield installation.
- 4—Attach Winfield carburetor (float bowl to front as illustrated) using same cap screws. Be sure to place flange gasket between carburetor adapting flange and manifold flange.

GASKET INFORMATION. When installing a Winfield, always use a very thin gasket. Never use a gasket that is over 1-64" thick. A thick gasket often warps the flange, and this warpage will cause an air leak that results in poor idling and poor low speed performance. Above all, **never use shellac or any other preparation on the gasket.**

- 5—Connect oil rectifier line to carburetor adapting flange using elbow fitting previously removed from the old carburetor.
- 6—Connect throttle rod to throttle arm. Make sure that the throttle on the carburetor opens up to wide-open position

when the foot accelerator is pressed down to the floor board. To determine if the throttle is opening to its maximum limit, do this: Have someone step on the foot accelerator for you while you listen to the carburetor. If you can hear the throttle hitting the stop, you know that it is opening to its maximum limits. This procedure is important because if the throttle does not open to its capacity, it will not develop full power and speed.

- 7—Connect outer arm on carburetor to oil pump regulator arm by means of the new rod furnished with this equipment.
- 8—Attach choke cable and wire to choke arm on carburetor. In making this hook-up, be sure that the choke on the dash is pushed all the way in before you make your setting. And when the dash choke is fully pushed in, make sure that the choke valve in the silencer is wide open. And see that the choke valve is fully closed when the choke control on the dash is pulled out. A partially opened choke when the dash control is pulled clear out will result in very hard starting. A partially closed choke after the motor is warmed up will ruin the gas mileage.
- 9—Connect up the gas line to the carburetor. Use the fitting furnished.

Adjustments

IDLING MIXTURE ADJUSTMENT—Always adjust the idling mixture with the spark retarded. Screw the idling adjustment valve in (clock-wise direction) for a richer mixture.

IDLING SPEED ADJUSTMENT, or throttle stop adjustment. Slower idling speed of the motor may be obtained by unscrewing the stop adjustment; for faster idling speed, screw in the stop adjustment.

OTHER ADJUSTMENTS—Before making other adjustments, screw the high speed and intermediate adjustment needles down in a clock-wise direction until they just barely seat. **Warning!** Do not screw these needles down too tight because too much force will distort the float bowl cover and gouge out the needle seat. Turn them down just to the point where there is a slight resistance.

INTERMEDIATE ADJUSTMENT—To get the approximate adjustment, turn this needle up in a counter-clock-wise direction to about 24 notches. The following is a good way to obtain an exact adjustment. Advance the spark lever to normal driving position; set throttle lever on the steering wheel to a position which will give about 30 miles per hour speed on a smooth road; then adjust intermediate needle to minimum opening that will give maximum engine speed for that throttle opening. This should give you a good average adjustment. Two notches less opening may give better economy for continuous driving or touring.

HIGH SPEED ADJUSTMENT—To get approximate setting, turn up the high speed adjustment needle in a counter clockwise direction to about 30 notches. The best way to test this adjustment is to try the car out on a hill. Set the needle to a point where you *feel* maximum power. Then turn the high speed needle down to an adjustment as lean as possible without losing power.

Ignition

Always check the ignition carefully. It is important that the ignition should be in first-class shape to get the best

results. A Winfield delivers a larger charge of mixture into the cylinders which means higher compression. This increased compression makes it harder for the plug to fire—there is more resistance. The ignition timing is also important as a late spark will result in a sluggish motor and give poor gas mileage.

Trouble Due to Faulty Ignition

IF THE MOTOR MIS-FIRES ON A HARD PULL, the trouble is usually due to spark plugs or coil.

1—Check the spark plug clearance. The proper clearance may be had by consulting the instruction book for this car. The Willys-Knight should have not more than .030.

2—If the plugs have gone 10,000 miles or more, a new set should be installed. The porcelain in an old plug no longer makes a good insulation because the voltage leaks to the shell of the plug. This results in a weak spark.

3—The coil may be weak. Test the coil or try a new one.

BACK FIRING, AS IF THE MIXTURE WERE TOO LEAN. First, make sure that the mixture is right and that there is enough gas in the carburetor. If the back firing still continues, it is due to pre-ignition. A new set of plugs should cure the trouble.

MOTOR IDLES UNEVENLY OR GALLOPS. If you are sure that the idling mixture has been adjusted as well as possible and this trouble still exists, then look to the valves and spark plugs.

1—Check the compression on each cylinder using the hand crank.

2—Check the spark plug gaps. A gap that is adjusted too close will cause this uneven idling.

MOTOR MISSING AT RANDOM, that is, it misses as much on the level as it does on a hill. The trouble is usually in the distributor points.

1—If the points are pitted, file them smooth or install a new set.

2—The gap on the distributor points should be between .015 and .018, or it will not make a good contact at high speeds.

Equipment 532

WILLYS-KNIGHT 66

RIGHT HAND INSTALLATION

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	33-B-3—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
1.....	98-B—Flange, including 2 63-A-7 Studs, 2 64-A-4 Nuts, 1 62-B Gasket.....	1.50
1.....	47-D-4—Throttle Rod .....	.25
		<hr/>
		\$28.75

This Carburetor is installed on the right hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points to the rear with the Cable Holder to the back.

The 33-B-1 Throttle Lever is installed on the back of body side.

The 33-B-3 Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 533

Mack AB, BB Truck

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	241-B—Choke Assembly	1.75
1.....	36-B-1—Choke Lever .....	.75
1.....	33-C-4—Throttle Lever .....	.50
1.....	57-D-3—Gas Fitting .....	.25
		<hr/>
		\$25.00

This Carburetor is installed on the right hand side of the motor with the float bowl pointing to the front.

The flange on the carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Choke Assembly points toward the rear.

The Choke Lever is installed on the side next to the frame.

The Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 534

White G. R. & G. R. B.

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	1004—Choke Assembly	6.00
1.....	1008—Choke Lever	1.00
1.....	1006—Cable Holder	1.00
1.....	33-C-4—Throttle Lever .....	.50
1.....	1013—Throttle Rod .....	.25
		<hr/>
		\$30.50

This Carburetor is installed on the left hand side of the motor with the float bowl pointing to the frame.

The flange on the Carburetor is drilled 25-64" over the Choke and tapped $\frac{3}{8}$ " U. S. S. over the float bowl.

The Choke points toward the motor and fits original hot air tube.

The Throttle Lever goes on the cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 535

Peerless 6-90

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-C-3—Choke Lever .....	.75
1.....	38-A—Choke Lever Stop .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	57-D-1—Gas Fitting .....	.25
2.....	63-A-6—Studs	
2.....	64-A-5—Nuts	
		<hr/> \$26.50

This Carburetor is installed on the right hand side of the motor with the float bowl to the front.

The flange on the Carburetor is tapped $\frac{3}{8}$ " U. S. S.

The Silencer points to the rear with the Choke Lever Stop next to frame.

The Choke Lever Stop points to the rear and slightly upward.

The Throttle Lever is installed on the back of body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 536

Buick Master 6, 1924

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-A-2—Choke Lever .....	.75
1.....	38-A—Choke Lever Stop .....	.50
1.....	33-B-2—Throttle Lever .....	.50
1.....	57-A-2—Gas Fitting .....	.25
1.....	99-E—Flange including 1 62-B Gasket, 2 63-A-1 Studs, 2 64-A-3 Nuts	2.00
1.....	141-B—Silencer Extension Elbow	1.00
		\$29.50

This Carburetor is installed on the left hand side of the motor with the float bowl to the back.

The flange on the Carburetor is drilled 21-64".

The Silencer points up with the Choke Lever Stop next to the motor.

The Choke Lever Stop points to the back and slightly up.

The Throttle Lever is installed on the back of body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 537

Nash Special 6, 1926

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-1—Throttle Lever .....	.50
1.....	57-D-2—Gas Fitting .....	.25
1.....	99-A—Flange, including 2 63-A-1 Studs, 2 64-A-3 Nuts....	2.00
1.....	113-A-3—Throttle Rod Clamp .....	.25
1.....	47-H—Throttle Rod .....	.25
1.....	114—Dash Control	1.75

\$30.75

This Carburetor is installed on the left hand side of the motor with the float bowl to the rear.

The flange on the Carburetor is drilled 21-64".

The Silencer points to the front and toward the frame so as to clear the water pump with the Cable Holder on top.

The Cable Holder points toward the motor and slightly to the rear.

The Throttle Lever is installed on the Throttle Cover side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Remove the butterfly valve in the manifold passage. This is easily accomplished by using a mirror to locate the two retaining screws in the stem. Do not disturb the balance of the heat mechanism as this should operate just the same as before.

Equipment 538

Jordan 6, 1927

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer.....	2.75
1.....	36-B-1—Choke Lever .....	.75
1.....	38—Cable Holder .....	.50
1.....	33-B-3—Throttle Lever .....	.50
1.....	57-E-2—Gas Fitting .....	.25
1.....	86-B—Flange, including 1 62-B Gasket, 2 63-A-1 Studs, 2 64-A-2 Nuts	1.00
		<hr/>
		\$27.50

This Carburetor is installed on the right hand side of the motor with the float bowl to the front.

The flange on the Carburetor is drilled 21-64".

The Silencer points to the rear with the Cable Holder next to the frame.

The Throttle Lever is installed on the back of body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

Equipment 540

Chevrolet

All Models Except Chevrolet Six

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	241-B—Choke Elbow Assembly	1.75
1.....	36-C-1—Choke Lever .....	.75
2.....	33-B-2—Throttle Levers	1.00
1.....	57-D-2—Gas Fitting .....	.25
1.....	73—Manifold, including 2 63-A-1 Studs, 2 64-A-3 Nuts....	6.50
1.....	47-C—Throttle Rod .....	.25
		<hr/>
		\$32.25

This Carburetor is installed on the left hand side of the motor with the float bowl to the front.

The flange on the Carburetor is drilled 21-64".

The Choke Elbow points to the back.

The Throttle Levers are installed one on each side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.

On all models prior to 1925 it is necessary to make a new Throttle Rod to fit the individual car.

Equipment 541

Buick Standard 6, 1925

This equipment consists of the following:

1.....	500—MB Body Assembly	\$21.75
1.....	246-B—Combination Choke and Silencer	2.75
1.....	36-A-2—Choke Lever .....	.75
1.....	38-A—Choke Lever Stop .....	.50
1.....	33-B-2—Throttle Lever .....	.50
1.....	57-A-2—Gas Fitting .....	.25
1.....	99-A—Flange, including 1 62-B Gasket, 2 63-A-1 Studs, 2 64-A-3 Nuts	2.00
1.....	141-B—Silencer Extension Elbow	1.00
		\$29.50

This Carburetor is installed on the left hand side of the motor with the float bowl to the back.

The flange on the Carburetor is drilled 21-64".

The Silencer points up with the choke stop next to the motor.

The Choke Lever Stop points to the back and slightly down.

The Throttle Lever is installed on the back of body side.

The Strainer Bowl can be turned to any angle by loosening retaining nut.