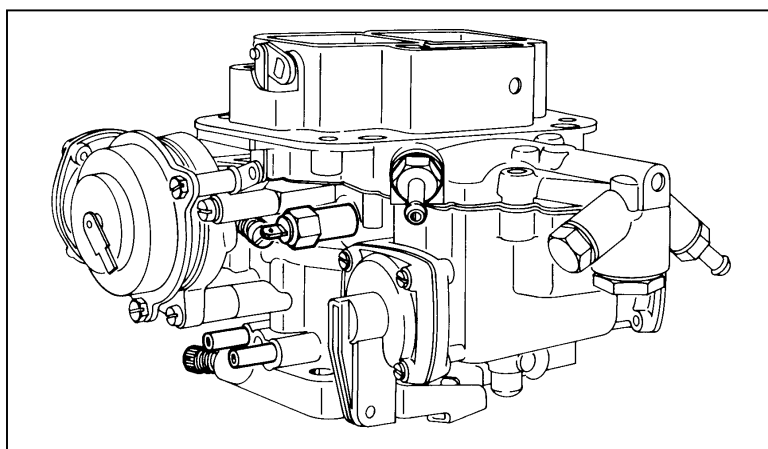
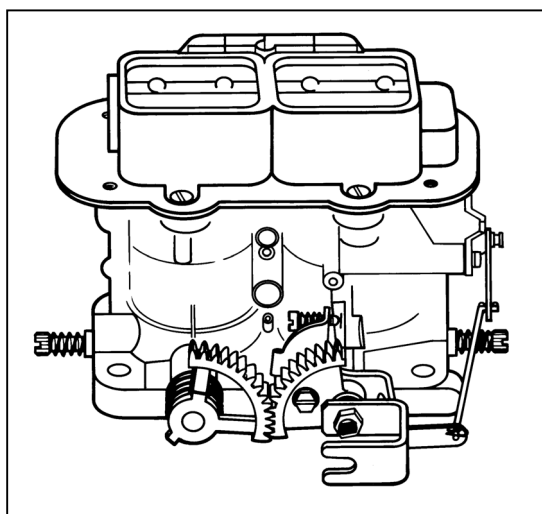
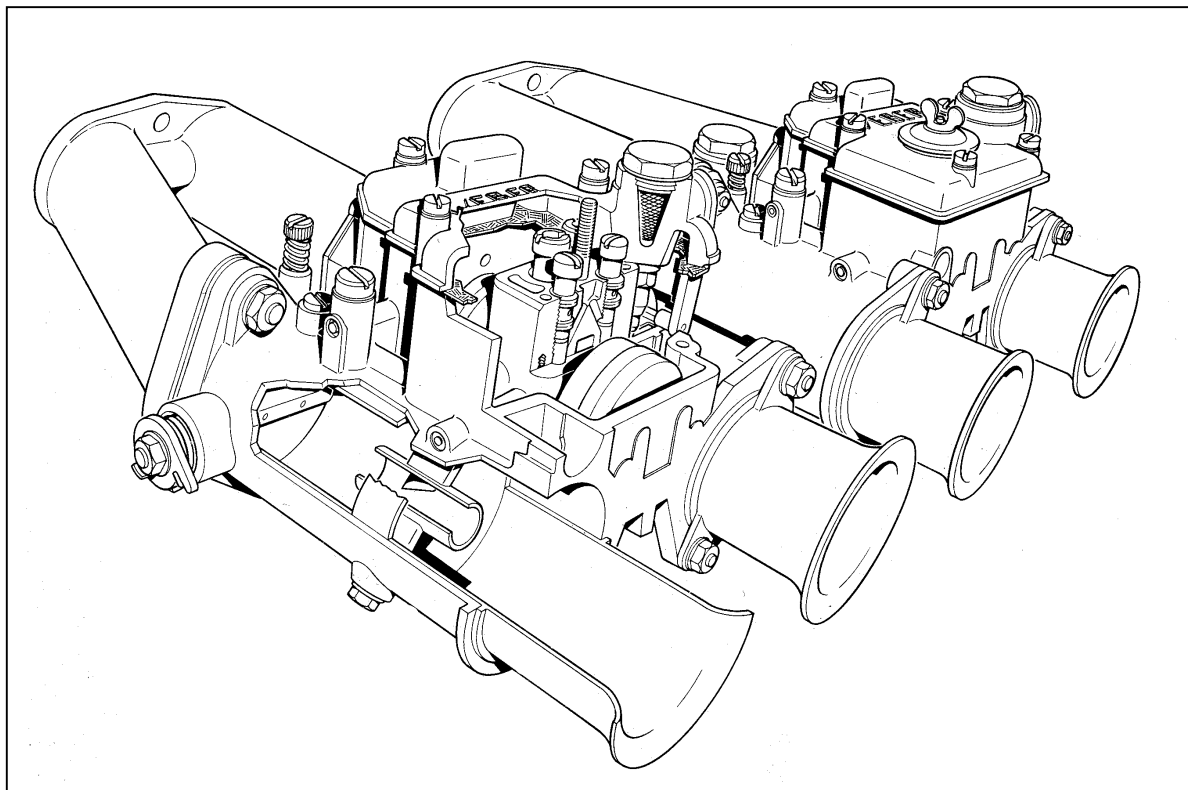


REDLINE WEBER

Tech notes and information
For kits and progressive product catalog

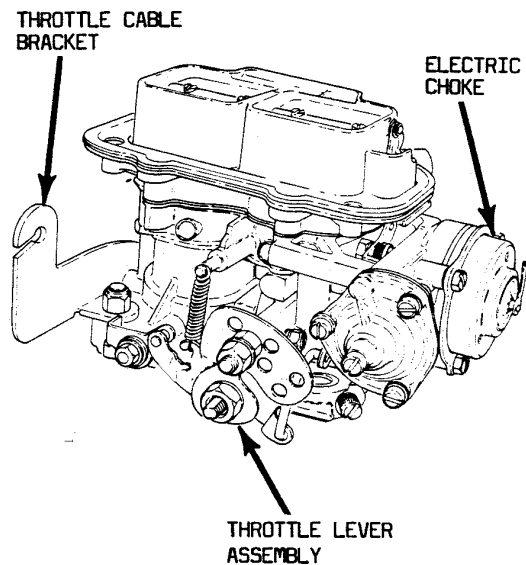


REDLINE WEBER

PROGRESSIVE CARBURETOR BENCH ASSEMBLY



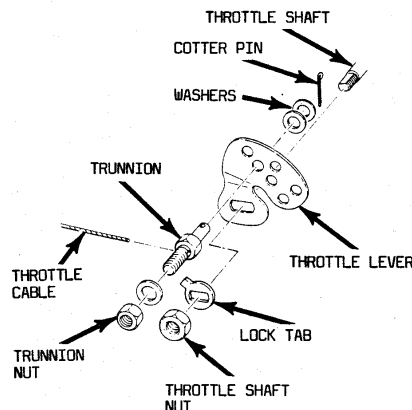
Bench assembly



1. Install the new REDLINE lever on the carburetor.

CAUTION: Do not over tighten throttle shaft nut.

Proper tightness can be achieved by installing nut just slightly more than finger-tight (finger tight then one more flat of the nut) and bend lock tab. After tightening, open choke and check for full throttle operation from idle stop to wide-open throttle. If any sticking or binding occurs, loosen nut and re-tighten with reduced torque. If excessive torque has been applied, re-centralization of the throttle plate may be necessary. This may require loosening nut and rapping on the end of the shaft with a small plastic mallet or a screwdriver handle (We are not driving nails here firm, but not abusive).



CARBURETOR SET UP AND LEAN BEST IDLE ADJUSTMENT

Base line Settings

Speed Screw 1 to 1 1/2 turns

Mixture Screw 2 turns

Final Settings	Mix
Engine	Speed
Running	

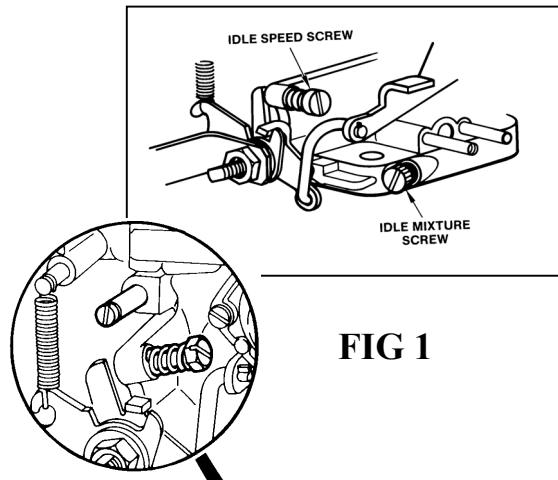


FIG 1

It is important to follow all linkage and lever installation instructions. The number one and two reasons for tuning errors are improper linkage installations and over tightened linkage nut, causing a binding in linkage assembly.

CALIBRATIONS MAY VARY DUE TO REGIONAL FUELS AND STATE OF ENGINE TUNE AND PERFORMANCE. POOR RUNNING QUALITY DOES NOT MEAN A DEFECT IN THE CARBURETOR. AN ADVANTAGE OF THE WEBER CARBURETOR IS ITS EASE OF ADJUSTMENT AND TUNING.

SET UP ADJUSTMENTS

Start set up by confirming carb base line settings. Do not depend on the factory delivered settings. Check them before the carb is installed.

1. All settings are done with choke disengaged or warmed up so that the choke is fully opened and disengaged. This is done on automatic choke carburetors by first opening the choke butterfly by hand and inserting a wood block or wedge of some kind to hold open while the linkage is cycled (linkage operated through its full movement) to clear the choke cam. (You will hear a metallic click as the cam is released. You can check the fast Idle screw under the choke assembly to confirm that it is not in contact with the choke fast idle cam.)
2. Set the Idle stop screw (speed screw see fig 1) by backing out the Idle speed screw until it is not in contact with the throttle stop lever. Cycle the linkage again to be sure that the linkage comes to close without any assistance. (Checking for linkage bind) Now bring screw back into contact with the lever and continue to open or screwing in 1 turn no more than 1 1/2 turns.
3. Set the mixture screw (see Fig 1) by first screwing in until the screw stops, bottoms out. **DO NOT FORCE OR BIND AS THIS WILL CAUSE DAMAGE TO THE SCREW AND IT'S SEAT IN THE BODY OF CARBURETOR.** Back out the screw 2 full turns.
4. TUNING

BE SURE TO FOLLOW THE NEXT INSTRUCTIONS IN THE PROPER SEQUENCE, DEVIATION WILL CAUSE THE CARBURETOR TO NOT FUNCTION TO ITS IDEAL SPECIFICATIONS AND MAY NOT PROVIDE THE PERFORMANCE AND FUEL ECONOMY AS DESIGNED.

4a. Start the engine, the engine will run very slowly more like a tractor. As long as the engine stays running idle speed is not important at this point.

4b. The first thing to do is not set up the idle speed, but to set the Idle mixture screw to lean best idle setting. First, turn in the mixture screw until the engine dies or runs worse, then back out the screw (recommend turning $\frac{1}{4}$ to $\frac{1}{2}$ turn at a time). The engine should pick up speed and begin to smooth out. Back out $\frac{1}{2}$ turn more, or until the screw does nothing or runs worse then turn back to the point where it ran its best.

Use your ear, not a scope or tuning instruments at this point. You want to tune the engine by sound. Adjust to best, fastest and smoothest running point.

4c. Now that the mixture screw is at its best running location, you can adjust the Idle speed the screw. The screw will be sensitive and should only take $\frac{1}{4}$ to $\frac{1}{2}$ turns to achieve the idle speed you like.

Check and set idle to your driving preference. Put the car in gear and apply slight load, (AC on) and set the Idle as you like it. Don't set it too high, as this will cause excessive clutch and brake wear. The Idle only needs to be 7 to 900 RPM with light load or AC on.

5. Recheck timing and vacuum hook ups. Recheck mixture screw to lean best idle again. If all is still best and smoothest idle then confirm and note the final settings.

To confirm settings with the engine running. Start by screwing in the mixture screw and count the number of turns it takes to bottom out and note if the engine dies. If Idle Mixture screws are within $\frac{1}{2}$ turn of base line setting then all is well and have fun. Also check the speed screw and note how many total turns from initial contact. You may have opened (turned in) the speed screw. Your final setting should be under 2 full turns. Reset the screws (back in) to the best final settings (Per your notes) and go on a test drive and have fun. If the settings are other than described then you may want to recalibrate the Idle circuit (low speed circuit) to your engines needs. This is done by following the rule of thumb BELOW.

Simple Rules for low speed calibration

If the mixture screw is more than $2\frac{1}{2}$ turns out turns then the Idle jet is too lean (too Small). When the mixture screw is less than $1\frac{1}{2}$ then the Idle jet is too rich (too large). These assumptions are based on the fact that the speed screw setting is not opened more than $1\frac{1}{2}$ turns. If the speed screw has to be opened 2 or more turns then this is also an indication of a lean condition usually requiring greater change. At times it may appear to be showing signs of richness or flooding it is really a lean condition. See pictures and notes in the tech 2 article supplied in the kit instructions, view and please understand the need to keep throttle plate as near to closed as possible so as not to prematurely expose the transition holes. This is what causes the visible rich condition, and confirms the need to increase the jet size. JET KITS are available if needed.

EXAMPLE With the speed screw set at no more than two (2) turns in after contact with the stop lever; and the best idle occurring with the mixture screw set at 3 turns from bottom, indicates the need for a larger Idle jet. Achieving the best idle at under 2 turns indicates the need for a smaller idle jet.

The secret to understanding the critical nature of the carburetor set up and the advantages of a WEBER over other carburetors is the Idle circuit. Referred to as the low speed circuit by Weber, this circuit is responsible for 80% of the driving operation. This is the reason that the Weber should give a fuel economy improvement over most factory carbs along with significant performance gains. In the worst case you should not see a significant fuel economy loss over stock, while improving HP & Drivability.

The Weber Carburetor is a sequentially timed device to the motor like the distributor. Time taken in the setup will provide more fun later.

If you should need to call REDLINE WEBER for technical assistance we will need to know your final settings to help. Technical assistance is free for the first 60 days of purchase. Units in service over 60 days may be assessed a service fee. All charges will be noted up front after a brief consultation to determine

any possible defect. If the carb is out of the warranty period and no defect is determined we will estimate the possible cost of tech support or recommend literature available that may help.

ALL WARRANTIES ARE HANDLED DIRECTLY THROUGH **REDLINE WEBER NOT THE RETAILER.** DO NOT SEND PARTS TO MANUFACTURER WITHOUT CALLING FOR TUNING CONSULTATION AND WARRANTY CONFIRMATION OR INSPECTION RETURN AUTHORIZATION. PARTS RETURNED WITHOUT AUTHORIZATION NUMBERS WILL BE REFUSED AND RETURNED FREIGHT COLLECT. **PARTS RETURNED FOR INSPECTION AND WARRANTY CONSIDERATION AND NOT FOUND TO BE DEFECTIVE WILL BE CHARGED A MINIMUM INSPECTION AND ADJUSTMENT CHARGE OF \$35.00 AND RETURNED FREIGHT COLLECT.**

Contact REDLINE WEBER at 1 800 733 2277 ex 7457 Monday thru Friday 8:00 to 5:00 Pacific Standard Time

Non warranty Tech support is on a fee for services basis with minimum charge of 35.00 per problem resolution . With tech support calibration and tuning parts will be available at discount pricing as well as access to technical support documents and mailings.

All IDF / DCOE / IDA / 38 DGAS Adjustments

Addendum to lean Best Idle adjustments

Notes and adjustments for IDF and DCOE Carburetors

adjustment procedures are the same as the progressive carbs. It is important to understand the dynamic differences of the two carb styles Progressive and Synchronous carbs Or better described as individual runner carbs.

The progressive idles through barrel and one mixture screw hole, then transitions to a secondary barrel with an additional Idle / low speed jet. The Individual Runner carbs IDF and DCOE have individual Idle jets and mixture screws for each barrel. They also have an additional air bleed screw and lock nut. This is not used for Idle adjustment or Idle quality. The settings for this screw should be closed.

The Main adjustments Speed and Mixture Screw for the individual runner carbs have different values than the Progressive. They tend to be $\frac{1}{2}$ of those used on the progressive

Standard IDF & DCOE Settings

Speed screw $\frac{1}{4}$ to $\frac{1}{2}$ turn in after contact with lever.

Mixture Screw 1 turn out from seated

Follow the same basic procedures as used with the progressive carbs with the exception that there is no choke system and no need to clear the choke cam.

It is important to be very sure there is no throttle shaft bind or over tightened levers. This is the number one reason for most adjustment and tuning problems.

The rules of thumb still hold true the base line settings are only the starting point. The example would be

If your mixture screw is out more than one turn like $1\frac{1}{2}$ turns then your idle jet is too lean go up one half size on the Idle jet not main jet.

If your mixture screw is not out one full turn something like only $\frac{1}{2}$ turn out from seat then your Idle jet is too rich. This is all based on the **important fact** that your speed screws are **not open** more than $\frac{1}{2}$ turn if they are then that is also an indication that you have a lean Idle circuit. You are cheating by opening the throttle plates and exposing additional progression holes in the transition.

These carbs are also commonly used in pairs, this makes the synchronization important please be sure when ever balancing twin carbs to bring the high carb down to the low carb then bring them both up to proper Idle speed demands.

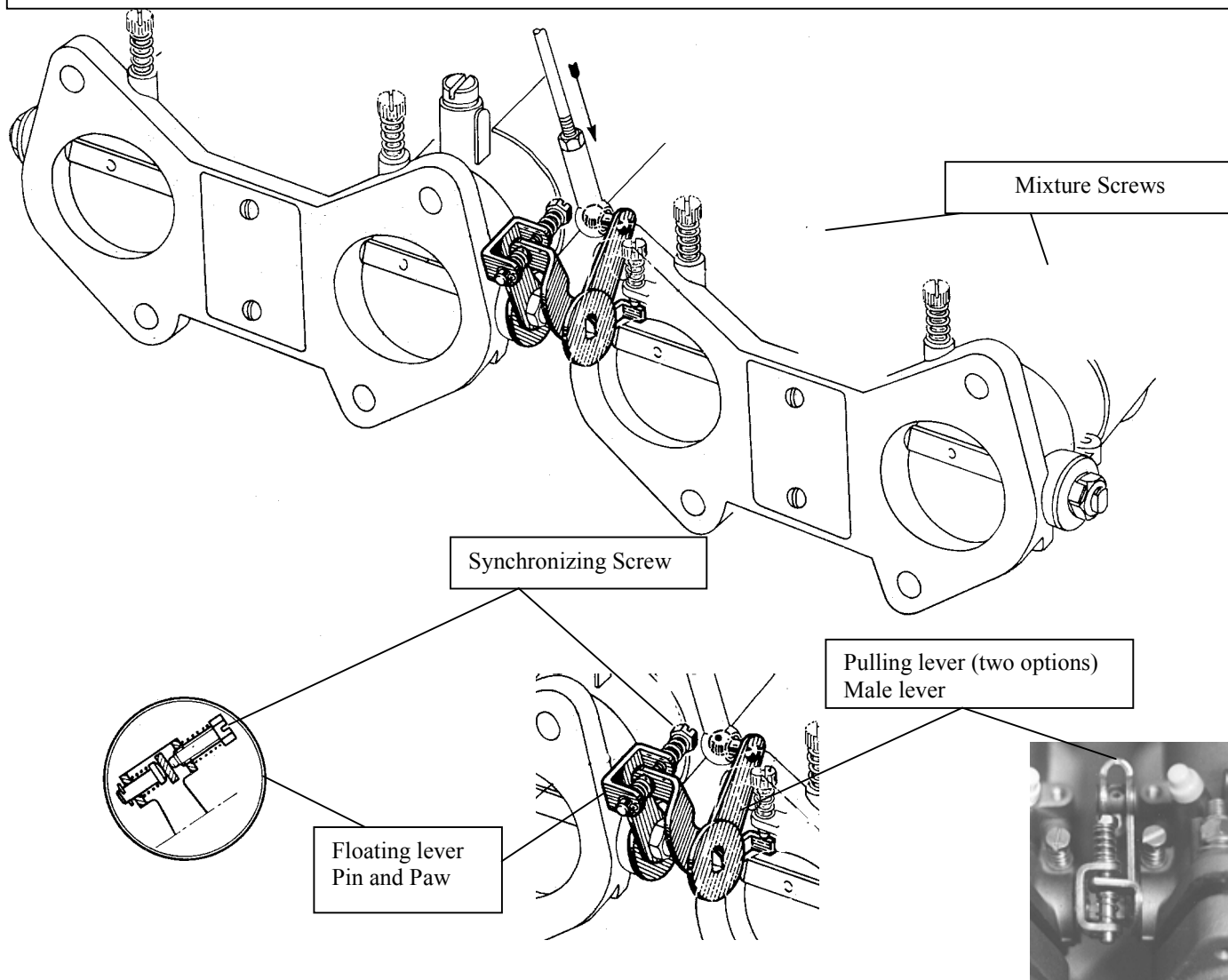
Most dual Webers

INSTALLATION GUIDE/LINKAGE

Part No. 99006-110 Universal DCOE Interconnecting linkage

NOTES

1. You will need to install levers on carburetors before installing them on manifold.
1. You have a choice of two lever styles be sure to determine how you want to connect cable to linkage. If you do not have a ball socket style cable then you will need to drill out (remove) ball from lever. Use part 99005 357-cable holder in place of ball.
1. Be sure to use caution when installing levers, **DO NOT OVERTIGHTEN CARBURETOR THROTTLE SHAFT NUTS** this will cause binding of shaft and possibly damage to the throttle plates and the body of carburetor.
1. Install cable support bracket to 4 screws on bottom of carburetor body (fuel chamber). Install on the same carburetor with the Pulling lever (male lever).
1. Run exposed cable through cable housing support bracket and to your pulling lever on carburetor. Remember you have three hook up options.

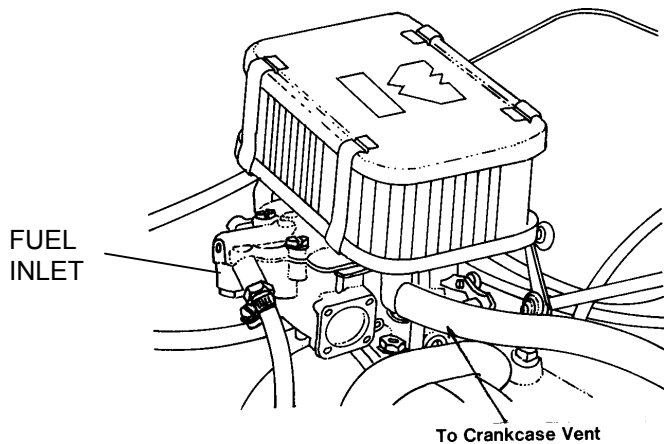
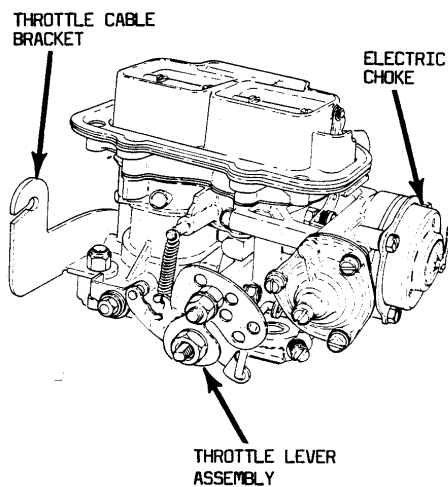
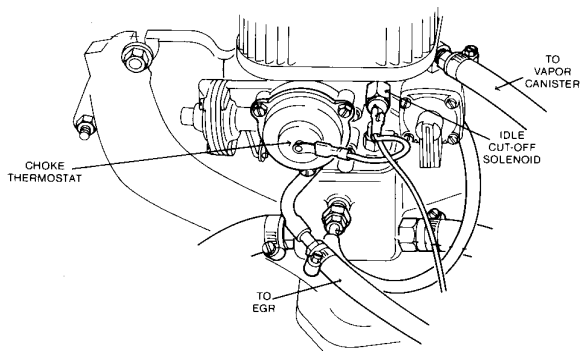
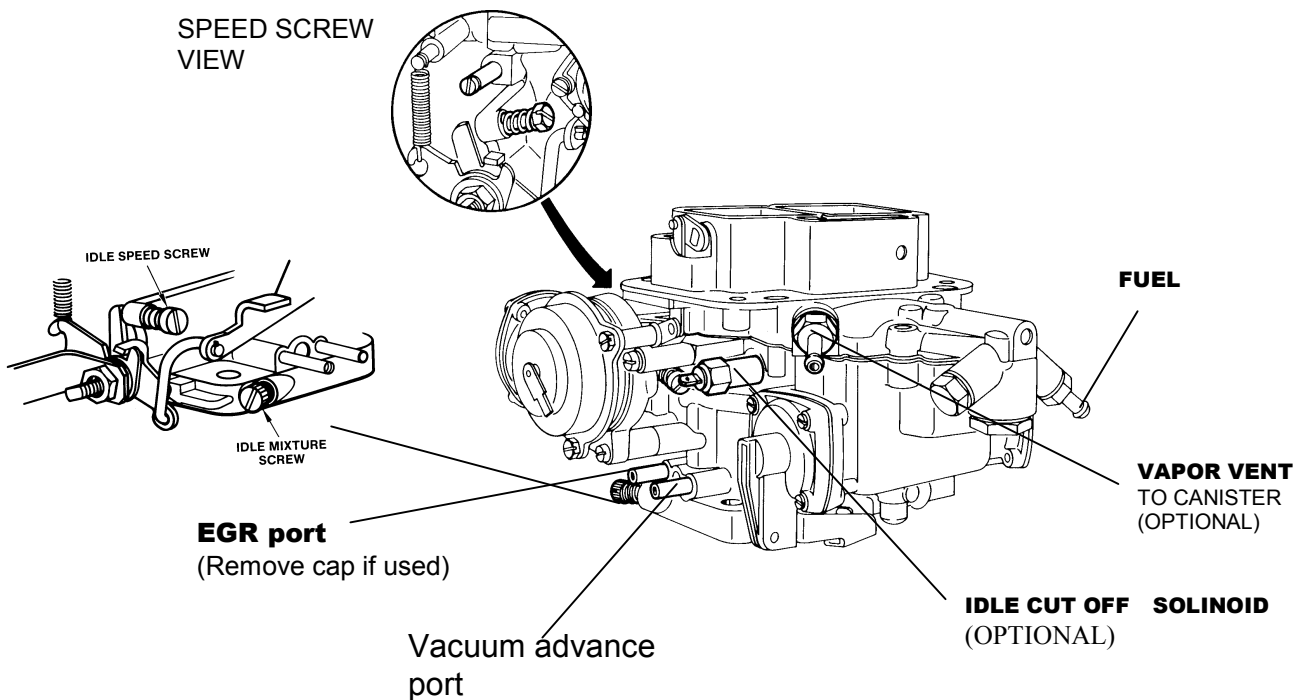


REDLINE WEBER

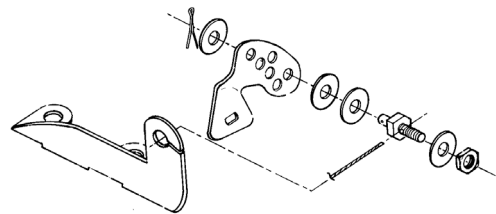
TYPICAL DGV CARB INSTALL VIEWS

These views may vary depending on application. For general assembly assistance only

SPEED SCREW
VIEW

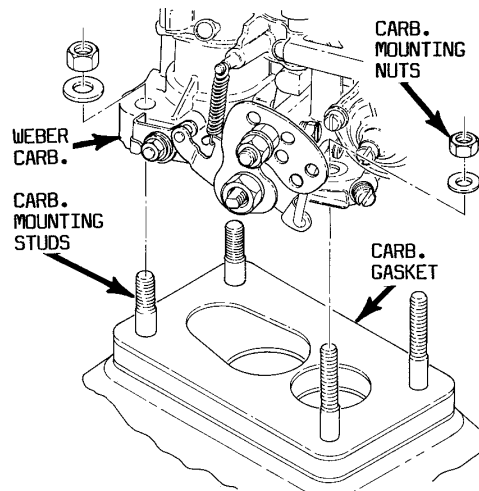
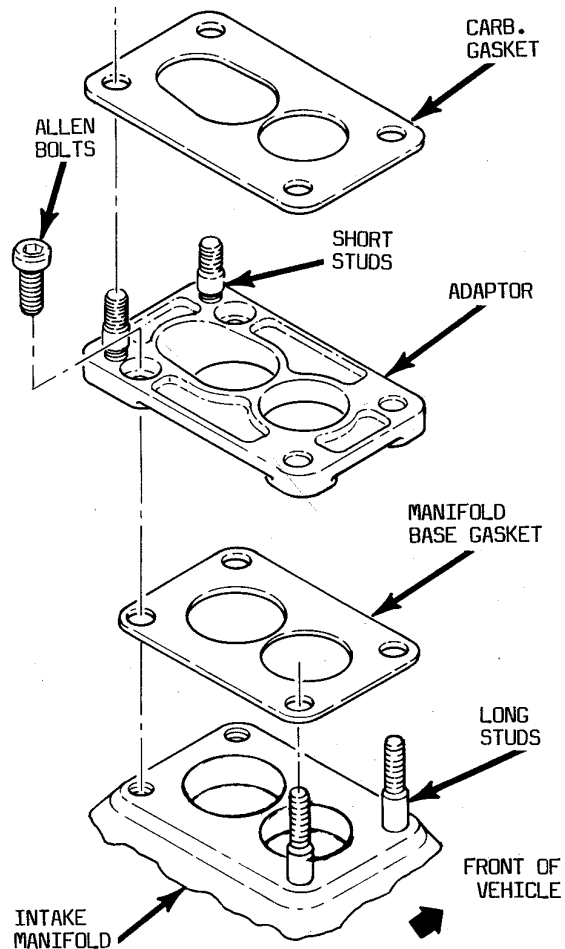
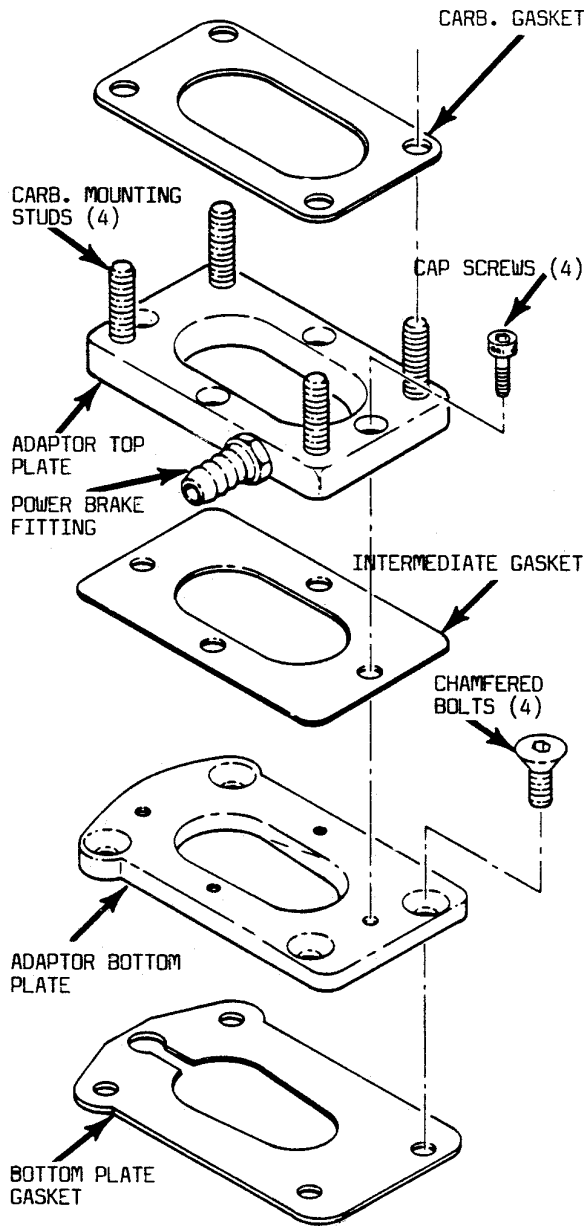


Air filter vent
to valve cover breather



REDLINE WEBER

Typical Adapter Installation Views



IMPORTANT

These are only typical views and may vary due to application.
PCV /Power Break fitting may not be supplied on some adapters.

REDLINE / WEBER CARBURETORS

34 ICT

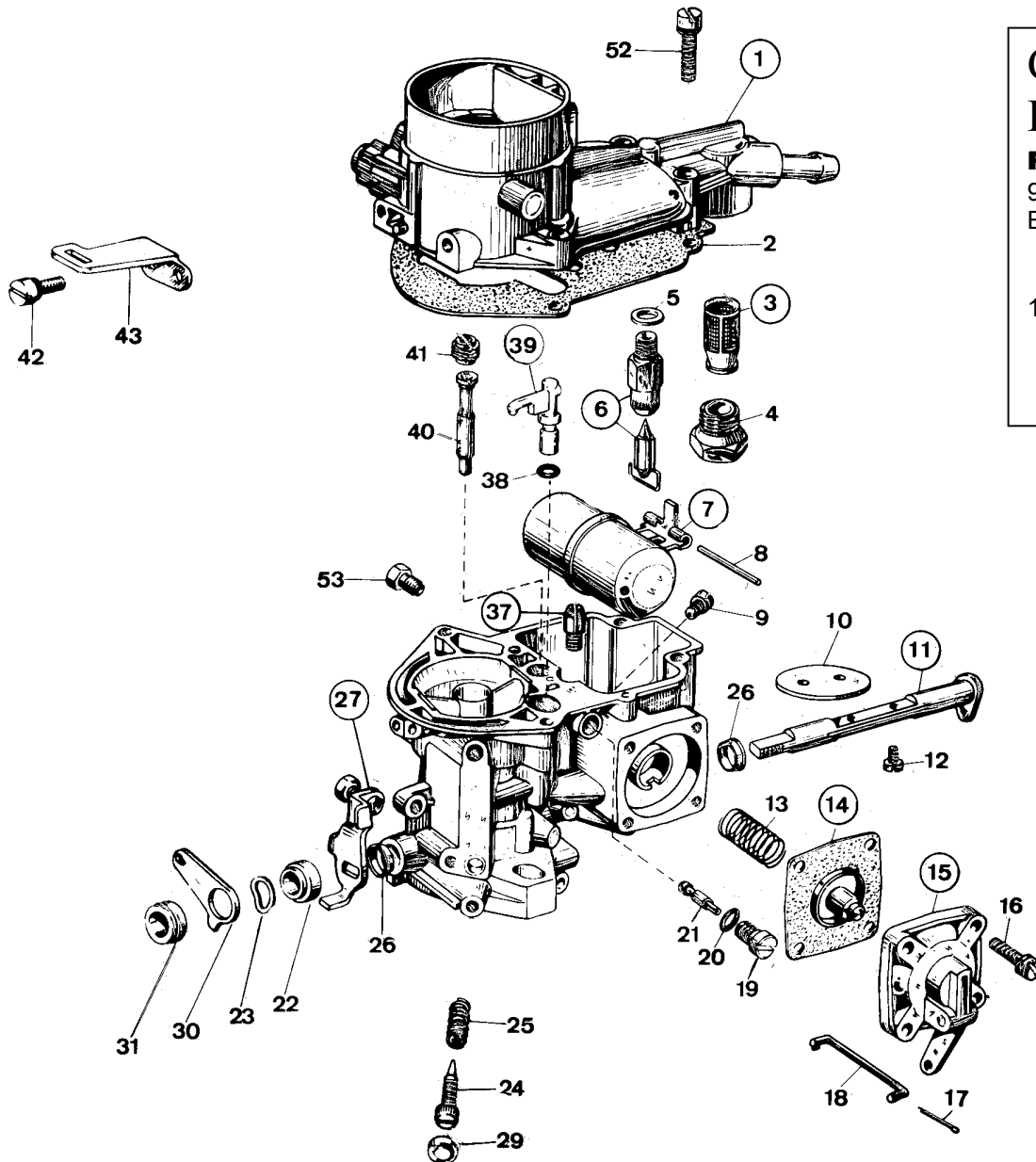
15290 027 34 ICT

Common Parts

Rebuild kit

92-0286-05
Base gasket
99024-417

14) 47407-016



Standard float setting is 6 to 6.5mm measured top of float to gasket not loading spring loaded ball on needle.

Float setting notes

1. Fuel pressure is critical to float spillage.Redline recommends 2.5 to 3 lbs.
2. For aggressive off-road float drop limited to 8 mm max drop. Measured float to gasket

KEY CALIBRATED PARTS

- 11) 79516-xxx Needle and seat (Steel needle)
- 79519-xxx (Viton performance needle)
- 12) 41015-011 Brass Float
- 9) 73801-xxx Main Jet
- 41) 77201-xxx Air corrector Jet
- 21) 74409-xxx Idle Jet
- 19) 52570-009 Idle Jet Holder

- 37) 79701-xxx Pump By-Pass Jet
- 39) 76407-xxx Accelerator pump Jet

REDLINE / WEBER CARBURETORS

32 / 36 DFEV - DFAV

PROGRESSIVE SERIES
22680 056 DFAV
22680 070 DFEV

Common Parts

Rebuild Kit

92-3230-05

Base gasket Kit

99005-068

Carburetor Rebuild kit does not include

Power Valve Assembly

54a) Electric Choke

57804-332

10) Power Valve Diap.

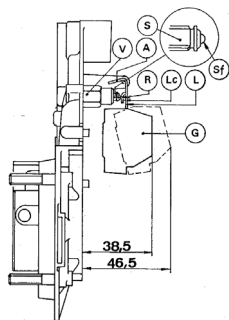
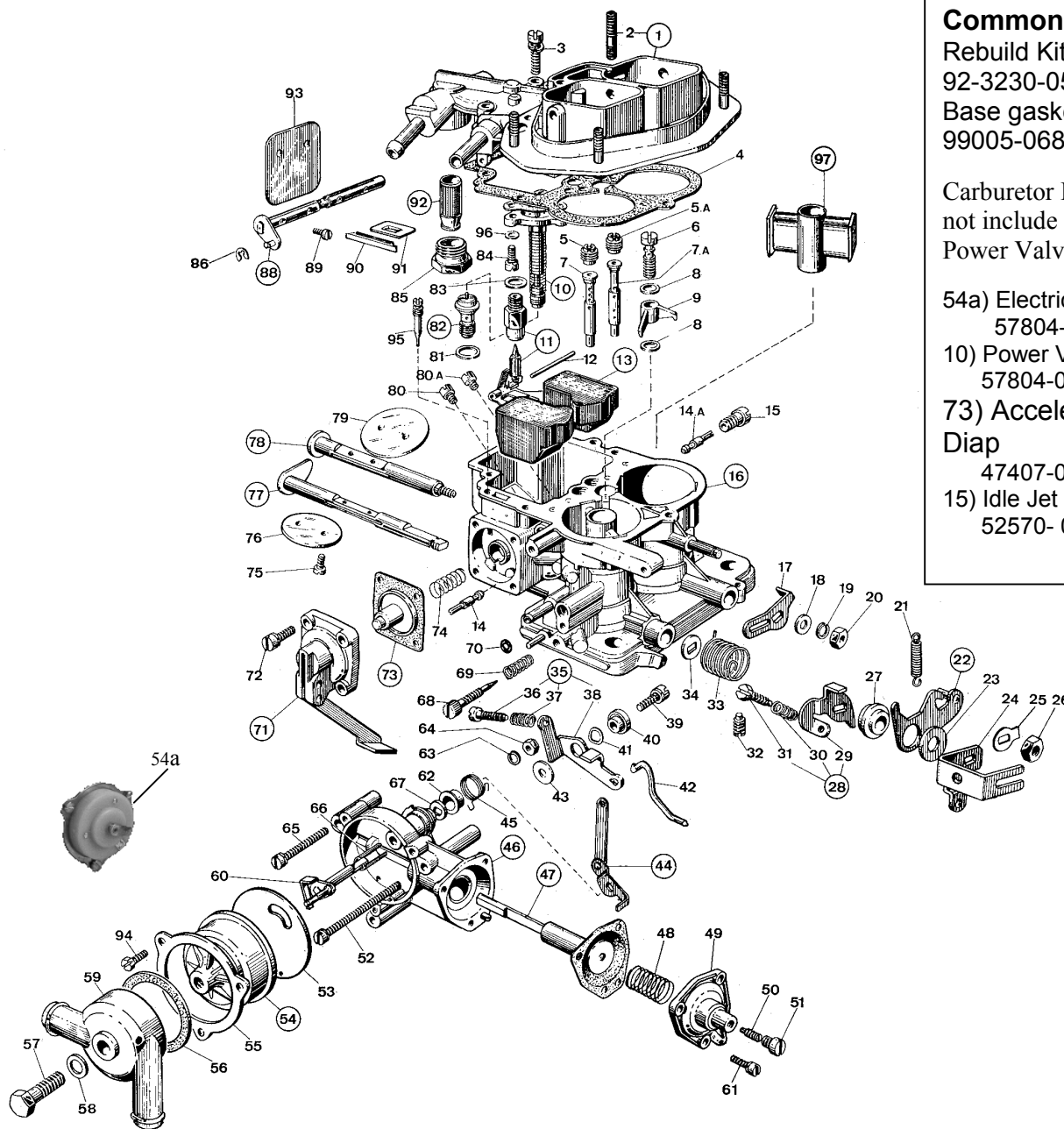
57804-096

73) Accelerator Pump Diap

47407-016

15) Idle Jet Holder

52570-005



Float setting notes

1. Fuel pressure is critical to float spillage. Redline recommends 2.5 to 3 lbs.
2. For aggressive off-road use float drop should be limited to 43mm max drop setting. This is done by setting tab A to limit drop.

KEY CALIBRATED PARTS

- 11) 79516-xxx Needle & Seat
- 13) 41030-022 Float
- 80) 73801-xxx Main Jet
- 5) 77201-xxx Air corrector Jet
- 15) 74403-xxx Idle Jet
- 9) 76211-xxx Accelerator pump Jet
- 76215-xxx Performance Double pump jet

REDLINE / WEBER CARBURETORS

32/36 DGEV-DGAV

PROGRESSIVE SERIES
22680 033B DGEV
22680 051 DGAV

Common Parts

Rebuild kit

92-3237-05

2) Power Valve

57804-097

35a) Electric choke

57804-333

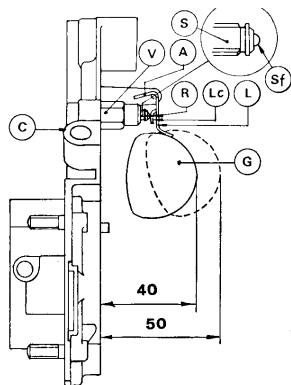
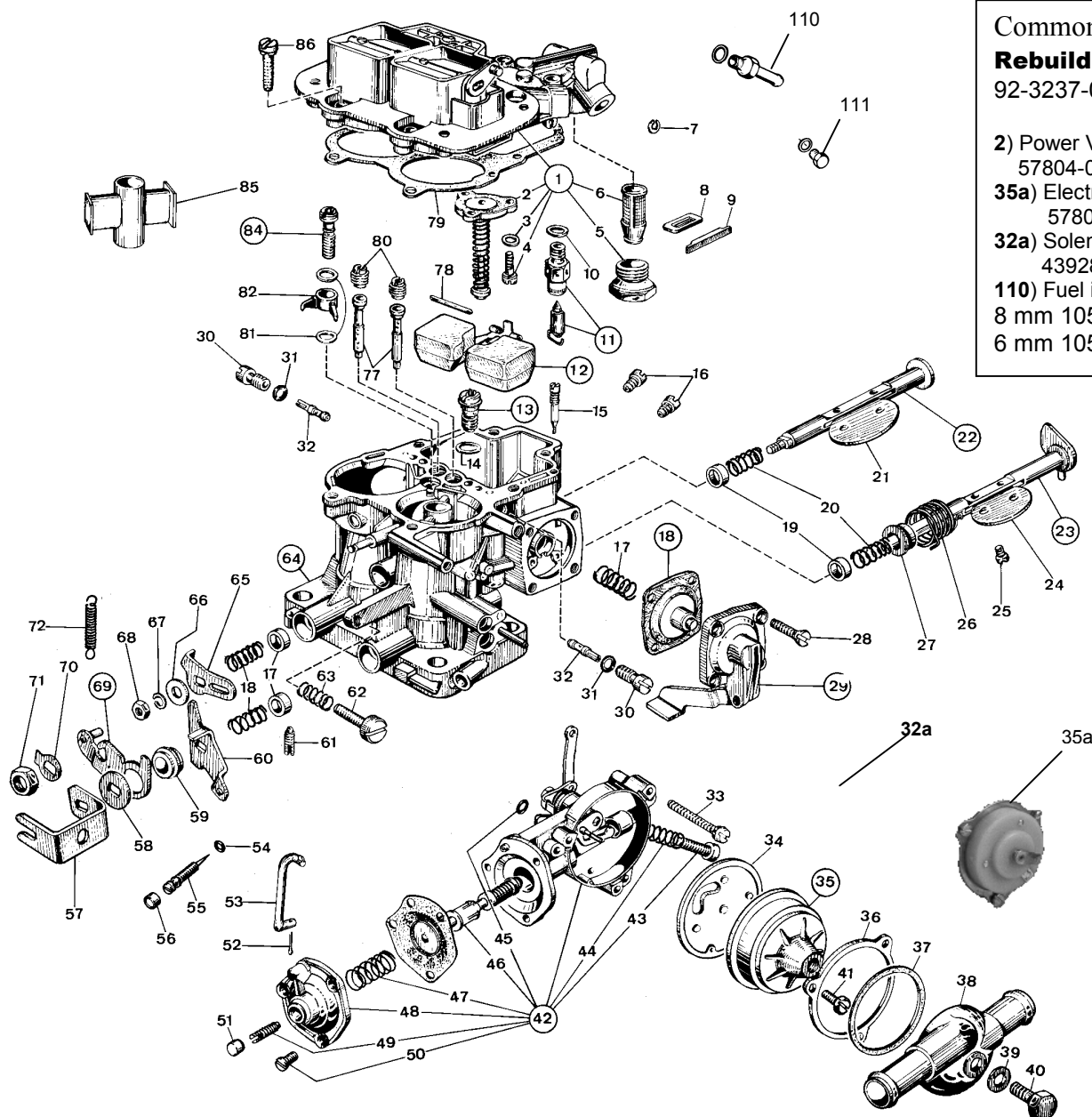
32a) Solenoid

43928-060

110) Fuel inlet

8 mm 10525 023

6 mm 10525 024



Float setting notes

1. Fuel pressure is critical to float spillage. Redline recommends 2.5 to 3 lbs.
2. For aggressive off-road float drop should be limited to 44 .5 mm max drop.

KEY CALIBRATED PARTS

11) 79516-xxx Needle and seat (Steel needle)

79519-xxx (Viton performance needle)

12) 41030-019 Brass Float

41030-020 Nitrofill Float

16) 73801-xxx Main Jet

80) 77201-xxx Air corrector Jet

32) 74409-xxx Primary Idle Jet (choke side)

74403-xxx Secondary Idle Jet (Inlet Side)

some early models have 74403-xxx on both sides

82) 76226-xxx Accelerator pump Jet

76212-xxx Performance Double pump jet

REDLINE / WEBER CARBURETORS

38 DGAS

OUTLAW SERIES
18930-020 38DGES
18930-032 38DGAS

Common Parts

Rebuild kit

92-3235-05

Base Gasket

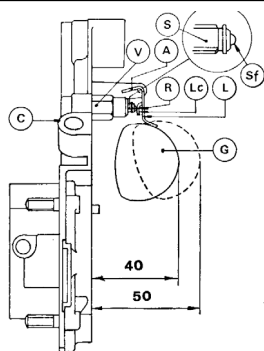
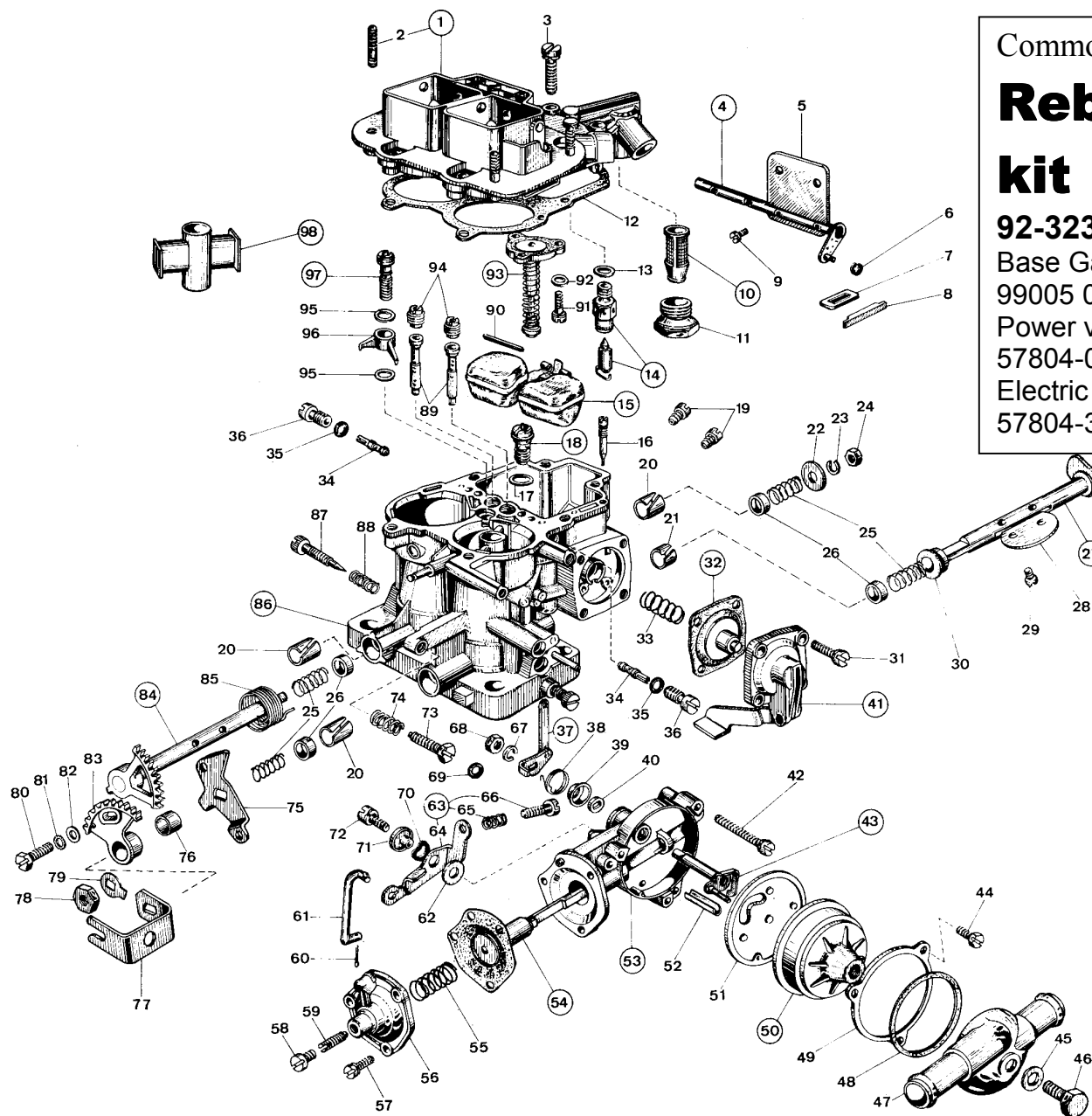
99005 068

Power valve

57804-097

Electric choke

57804-333



Float setting notes

1. Fuel pressure is critical to flc Redline recommends 2.5 to 3 lbs. max.
2. For aggressive off-road float should be limited to 44.5mm max. drop

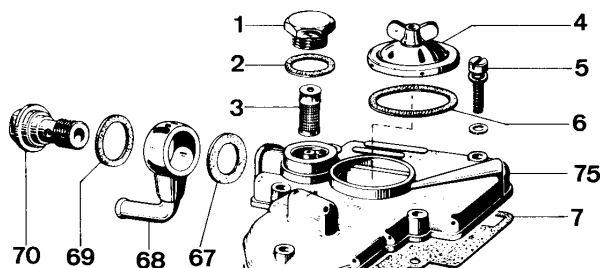
KEY CALIBRATED PARTS

- 14) 79516-XXX Needle and Seat (Steel needle)
79519-xxx (Viton performance needle)
- 15) 41030-019 Brass Float
- 19) 73801-xxx Main Jet
- 94) 77201-xxx Air corrector Jet
- 34) 74409-xxx Idle Jet (choke side)
74403-xxx Idle Jet (Inlet Side)
some early models have 74403-xxx on both sides
- 96) 76212-xxx Accelerator pump Jet

REDLINE / WEBER CARBURETORS

40-45 DCOE (Typical)

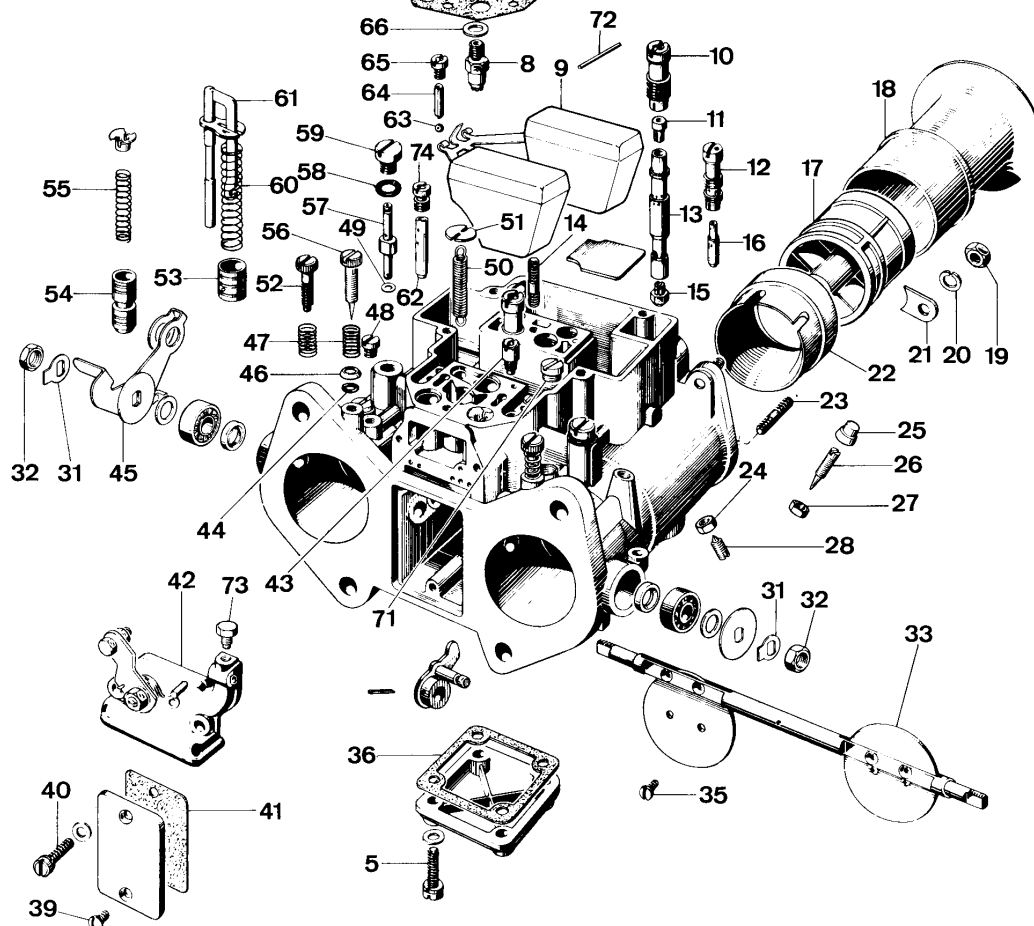
PERFORMANCE SERIES
19550-174 40 DCOE
19600-060 45 DCOE



NOTE:

There have been two key productions of the DCOE they can be distinguished by the float style
Early w/brass floats
Late w/nitrofil Black floats

(Picture used is late style)



Rebuild Kit

92-3246-05
Early style kit
w/o float

92-1514-05
Late style kit
w/o float
Use with all turbo
applications

For mounting use
Soft mount O ring kit
99005-145
fits 40-45 DCOE

Float Settings

Early style brass float
8 to 8.5mm (at radius)

Late style plastic float
12.5 to 13mm at
extreme tip of float

All settings are gasket
to float

Float setting notes

1. Fuel pressure is critical to float spillage 2.5 to 3 lbs.
2. For aggressive off-road use float drop should be limited to 1 to 1.5 mm max drop of tap for float needle

KEY CALIBRATED PARTS

- 8) 79503-xxx Needle & Seat
- 9) 41030-005 Brass Float (early style)
- 9) 41030-034 Nitrofil Float (late style)
- 15) 73401-xxx Main fuel Jet
- 11) 77401-xxx Main Air corrector Jet
- 16) xxxxx-xxx Idle Jet Idle jet has both a size and f number designation call for part no
- 57) 76801-xxx Accelerator pump Jet
- 43) 79701-xxx Accelerator by-pass Jet

REDLINE / WEBER CARBURETORS

40 44 48 IDF- XE

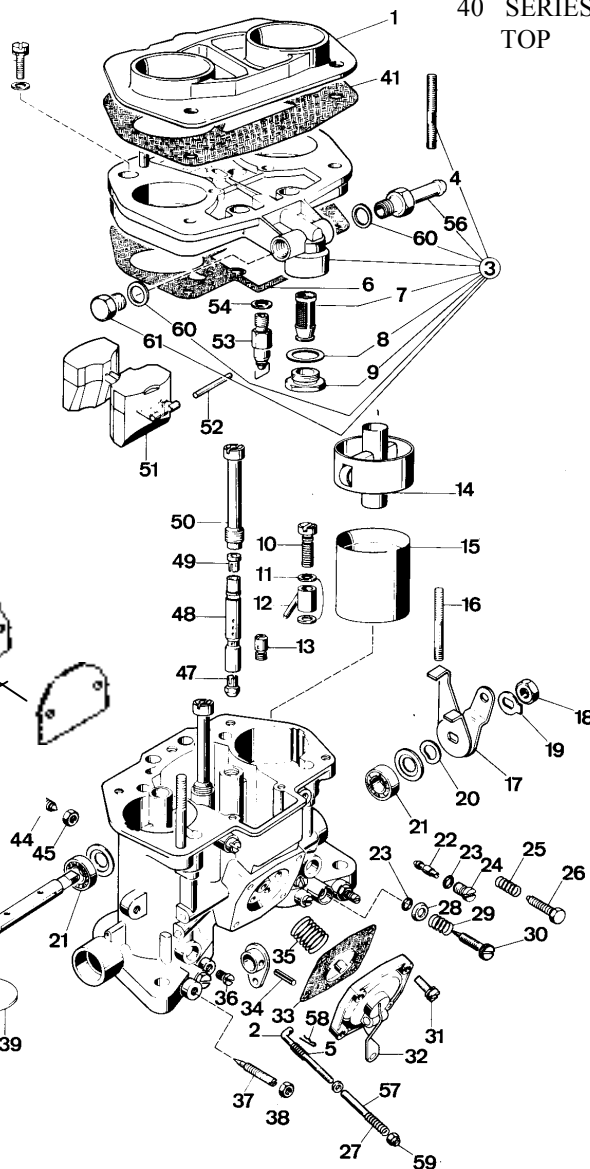
PRO SERIES
18950-138 40 IDF 70
18890-030 44 IDF 71
19030-021 48 IDF 6

Late style IDF XE shown

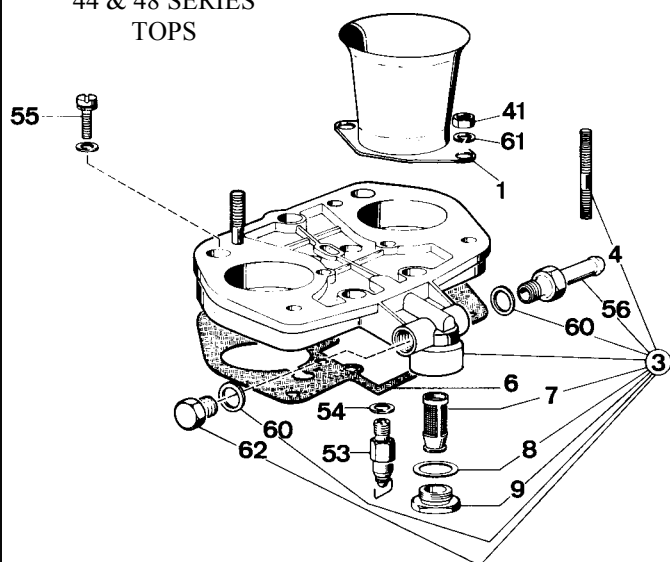
Early style can be identified by its cam and roller style accelerator pump action.

Redline Weber rebuild kits contain both styles of pump diaphragms

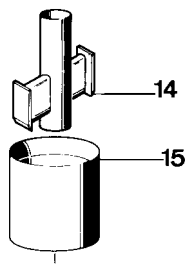
VIEW
40 SERIES
TOP



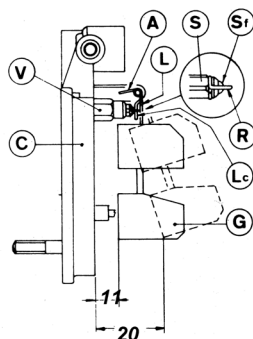
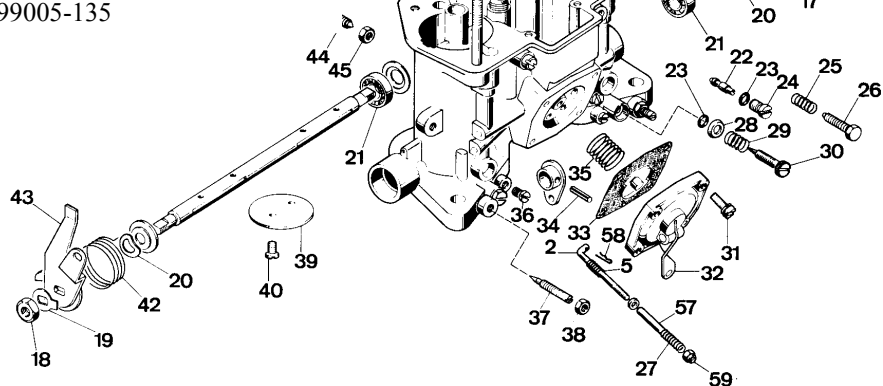
VIEW
44 & 48 SERIES
TOPS



44 & 48
VENTURIES



BLANKING PLATE KIT
99005-135



Float setting notes

15) 41030-008 Float

1. Fuel pressure is critical to spillage 2.5 to 3 PSI.
2. For aggressive off-road use float drop should be limited to 15 .5 mm max dr

KEY CALIBRATED PARTS

- 50) 52580-006 Extended Jet holder
- 53) 79511-xxx Needle & Seat (steel)
- 79519-xxx Viton performance Needle & Seat
- 19) 73401-xxx Main Jet
- 94) 77401-xxx Air corrector Jet
- 34) 74405-xxx Idle Jet
- 13) 79701-xxx Pump by-pass (use 000 for performance)
- 96) 76210-xxx Accelerator pump Jet
- 33) 47407-207 Accelerator pump diaphragm XE style
- 47407-027 Accelerator pump diaphragm early style

Rebuild kit 92-3240-05

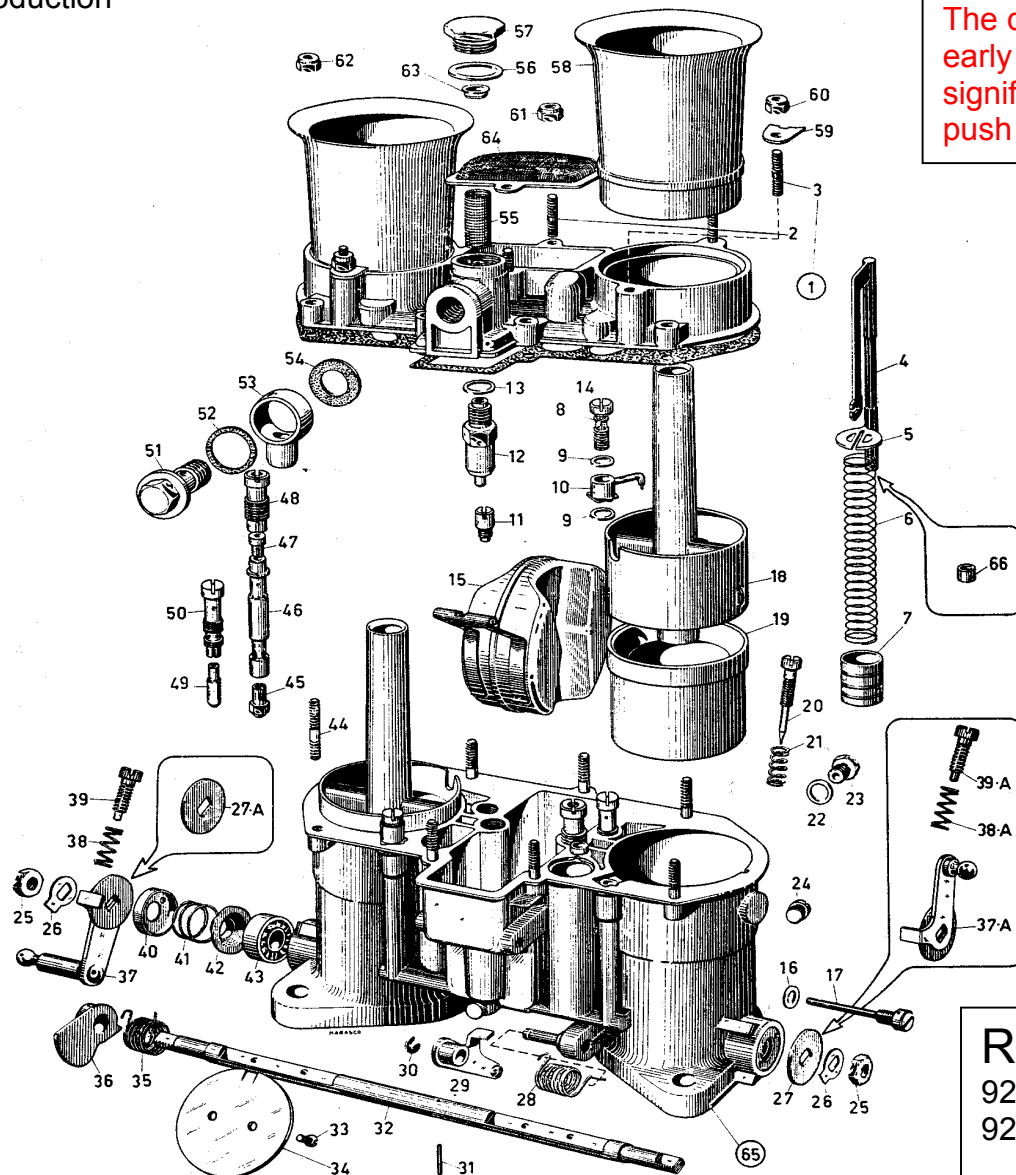
REDLINE / WEBER CARBURETORS

48IDA

PROLINE CARB SERIES
19030 015
19030 019

The 48 IDA is no longer in production

The diagram used is the early style Most significant change is to a push in style pump jet



REBUILD KITS

92 3248 05 w/o float
92 1050 05 w float

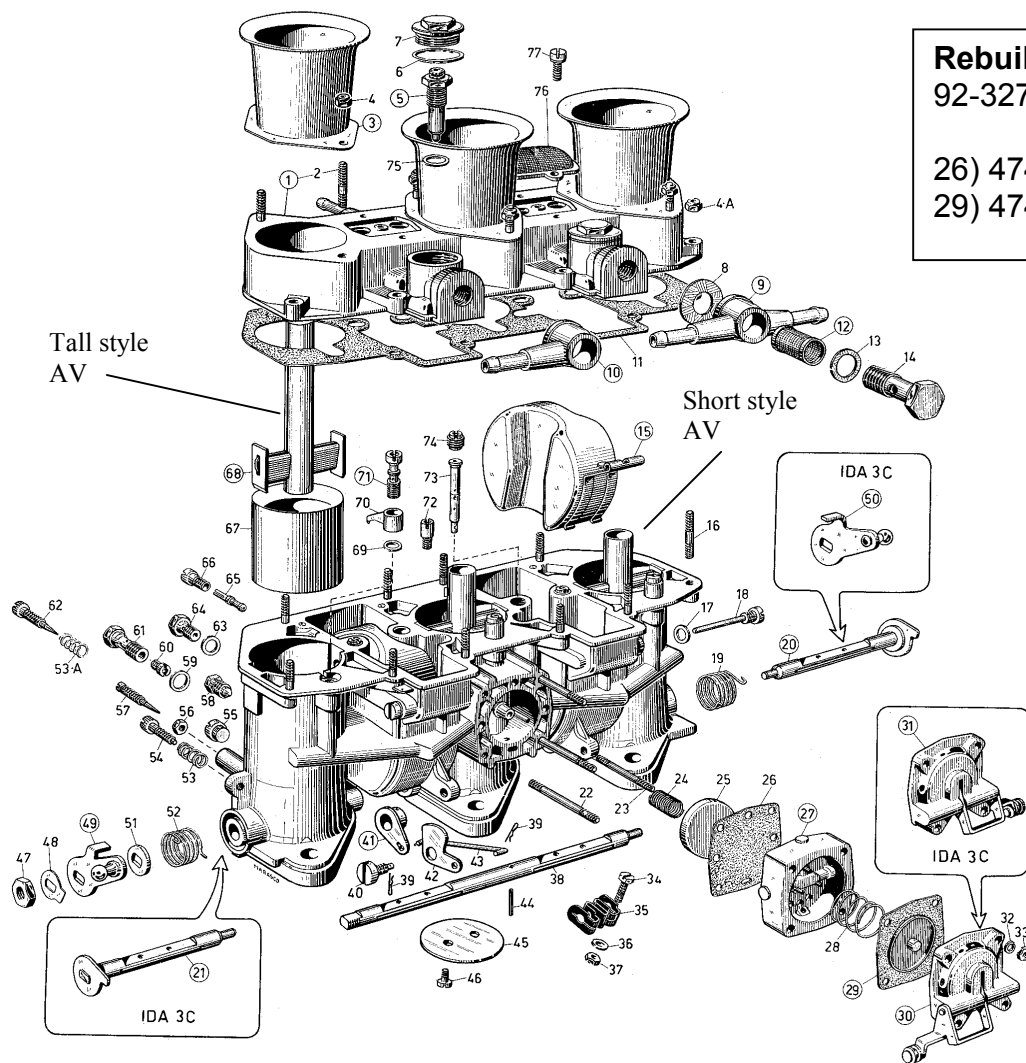
KEY CALIBRATED PARTS

- 10) 76402 xxx Pump Jet late style push in
76407 xxx Pump Jet Early style bolt in
- 12) 79504 xxx Needle Valve
- 15) 41015 007 Brass Float
- 19) 72128 xxx Venturi (Choke)
- 45) 73401-xxx Main Jet
- 46) 61450 xxx Emulsion Tube
- 47) 77401-xxx Air corrector Jet
- 49) 74823 xxx Idle Jet

REDLINE / WEBER CARBURETORS

40 & 46 IDA 3c/3c1 (3 barrel typical view)

Limited Production
31300-001 / 002 40 IDA
31360-008 / 009 46 IDA

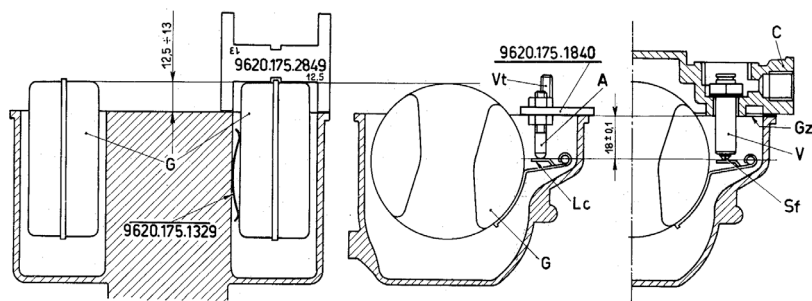


Rebuild kits

92-3276-05 w/needle & float

26) 47405-011 Diaphragm

29) 47407-010 Diaphragm



Float setting notes

1. Fuel pressure is critical to float spillage
2.5 to 3 PSI. Max

67) 71502-xxx 40mm Venturi
71504-xxx 46mm Venturi

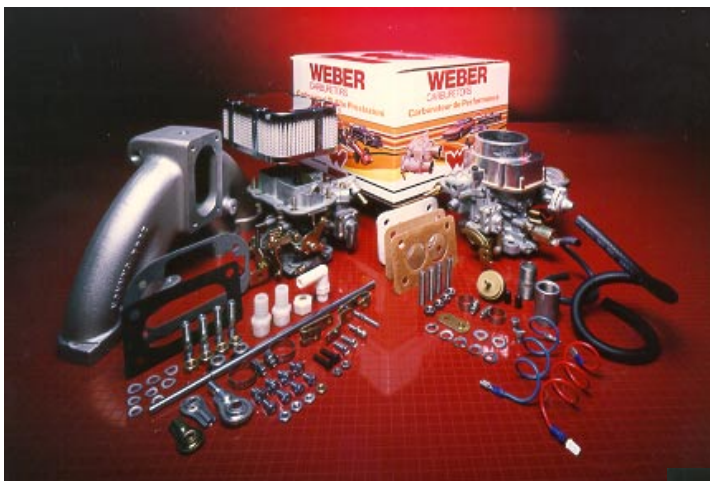
68) 71103-450 40mm Aux venturi (short style)
71104-450 46mm Aux Venturi (Tall style)
Aux ventures are interchangeable

KEY CALIBRATED PARTS

- 5) 79508-175 / 200 Needle & Seat
- 15) 41015-007 Float
- 60) 73801-xxx Main Jet
- 74) 77201-xxx Air corrector Jet
- 65) 74403-xxx Idle Jet
- 70) 76201-xxx Accelerator pump Jet
- 73) 61440-xxx Emulsion Tube

REDLINE WEBER

Not all WEBER's are created equal



REPLACEMENT PERFORMANCE

Using the WEBER 2 bbl progressive the REDLINE kits are pre-calibrated and designed to fit.

All REDLINE kits come with parts necessary for the installation. Included in each kit is a full set of instructions as well as a toll free tech support for the first 60 days

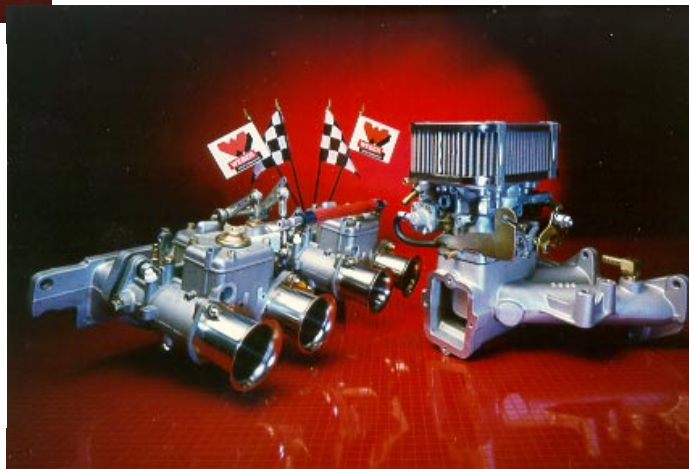
OUTLAW

AND

PROLINE PERFORMANCE

Outlaw utilizes the 38 DGES WEBER for maximum torque and bolt on performance

PROLINE performance for the street or track kits using the DCOE and IDF carburetors jetted and tuned to work



ULTIMATE VW PROGRAM

The most complete and full range of WEBER carburetors, Wild to Mild After 25 years we learned some tricks. Our kits are a little more expensive, but they work best.

All duals come with steel hex bar, billet lever, crossbar linkage and REDLINE offset manifolds for easy install and good looks.

All IDF singles come with smooth pull linkage and REDLINE full flow preheat manifolds.

(heat all the way to the carb base, where it needs to be)
SIMPLY THE BEST !!!

The REDLINE WEBER difference

1-800-733-2277 ex 7345 or E-mail to redline@redlineweber.com

19630 Pacific Gateway Dr, Torrance, California, 90502.