ZPN 233789 1/3

Thank you for purchasing this Dynojet kit. This kit has been developed for a motorcycle which is set to the parameters listed at the right in the "Stage" descriptions.
If your motorcycle does not meet any of these parameters, you may have the wrong kit, so please check with Dynojet before installation. For technical assistance contact your Dynojet distributor or call Dynojet U.S.A.
1-800-992-4993

Carburetor Re-calibration kit

E8102.002

European Models Only

1989-98 Harley Davidson Keihin CV Carb w/Accel. Pump

For mildly tuned machines using the stock airbox, with stock filter. May also be used with a good aftermarket exhaust system.

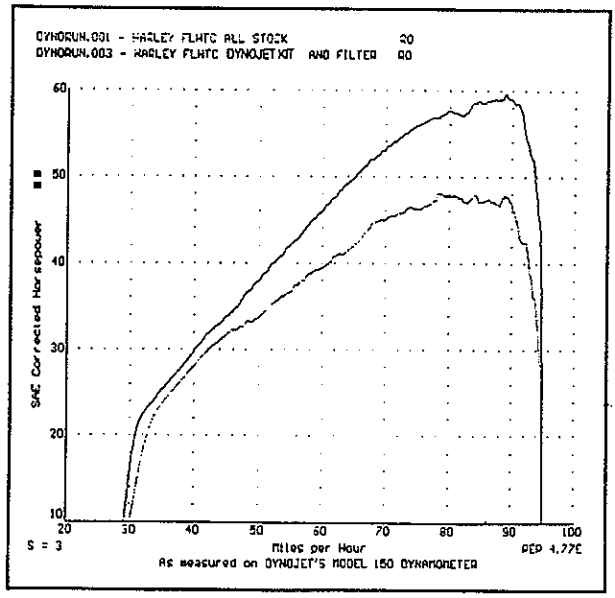
WARNING

NO SMOKING!
NO OPEN FLAME!

WHILE INSTALLING YOUR DYNOJET KIT.

2191 Mendenhall Dr. Suite 105
North Las Vegas, NV 89031 U.S.A.
TEL: 702-399-1423
FAX: 702-399-1431
Office hours:
8AM-5PM Pacific Time
Monday through Friday

INTERNET ADDRESS:
HTTP://WWW.DYNOJET.COM



This graph shows a typical gain with a Dynojet jet kit.

PARTS LIST		
1	Main Jet	DJ160
1	Main Jet	DJ170
1	Main Jet	DJ180
1	Main Jet	DJ190
1	Slide Drill	DD# 29
1	Fuel Needle	DNO851
3	Adjusting Washers	DW0001
1	E-Clip	DE0001
1	Slide Spring	DSP009
1	Emulsion Tube	DET001
1	Plug Drill	DD# 5/32
1	Screw	DSOOO1

28092499

1. Remove vacuum slide from carb. Remove stock needle & spacers, noting order of assembly. Locate the slide lift hole using Fig. A, with slide drill DD# 29 supplied, enlarge your slide lift hole.

2. Install Dynojet needle on groove# 3- if bike is all stock, if using exhaust, cams, or aftermarket airbox- set the needle on groove# 4. Install the Dynojet washers above the E-clip (Fig. A). Your carburetor should have an accelerator pump like the one in Fig. C, if it does not, stop and call Dynojet.

3. Install the Dynojet spring in place of the stock spring, making sure spring is aligned properly. You may use the stock spring for slower throttle response.

4. Place the carb upside down on the bench. Remove stock main jet and remove the emulsion tube(Fig. B), sometimes referred to as the main jet holder. Replace the stock emulsion tube with the Dynojet tube provided. When the Dynojet emulsion tube is fully seated there will still be threads visible. Install the Dynojet main jet provided. Use DJ170 with a completely stock bike. Use DJ180 with an aftermarket exhaust, airbox, or cams.

6. Locate the Fuel Mixture Plug(Fig. C), if you see a screw head at Fig. C proceed to adjusting procedure. With the 5/32 drill provided, carefully drill thru the plug. NOTE: the mixture screw is directly underneath this plug, be ready to pull back on the drill the instant you break thru. Use screw provided to secure and remove the plug. Carefully turn mixture screw clockwise until they seat, turn out 3 turns.

Notes:

1. In order for this kit to work your pilot circuit must be completely stock. Also check to make sure the stock pilot jet has not been drilled larger.

Fig. A

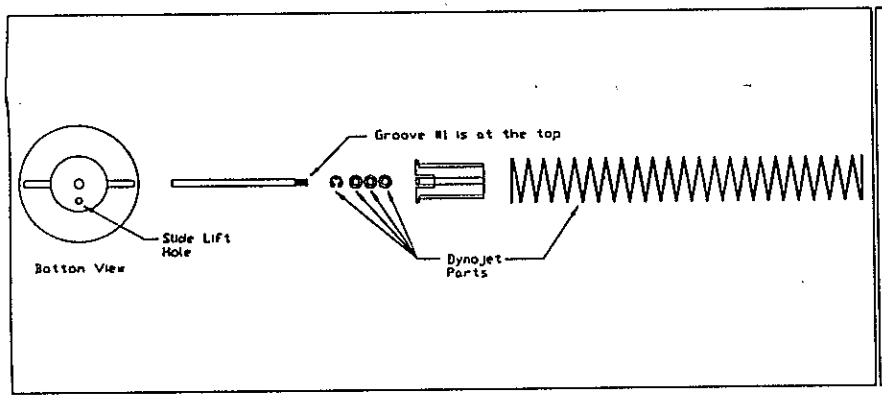


Fig. B

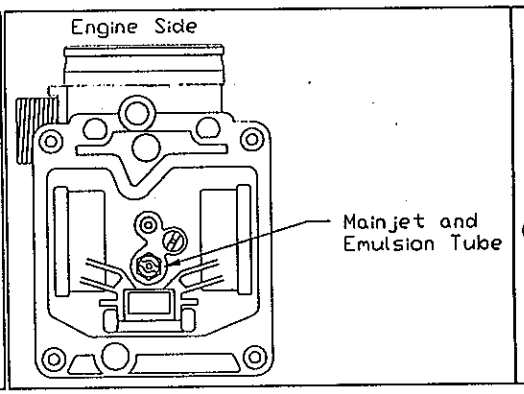
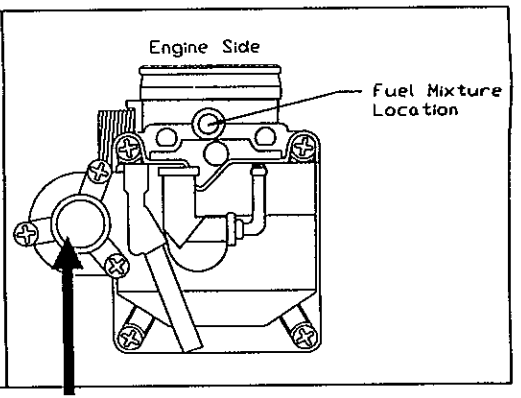


Fig. C



accelerator pump

TROUBLESHOOTING GUIDE DIG007

Proper idle before installation of this kit is required.

WARNING! BEFORE STARTING THE MOTORCYCLE:

1). Check fuel V.O.E.S. vacuum line.
2). Open and close throttle. Check for smoothness and full operation. Check accelerator pump action. Make sure actuation rod is installed correctly in float bowl.
3). Turn on fuel tap and check for any leaks.

CHECK ON INITIAL START-UP:

1). Start the engine. Turn handle bars from lock to lock to ensure cables are routed properly.
2). Blip throttle 2 or 3 times to ensure linkage is not sticking.
3). Check engine kill switch for correct operation.

After completing your installation and following the proper safety precautions, your machine should function properly with noticeable performance gains. If your machine functions well, but does not seem to have any performance gain, try needle positions on either side of the base settings to improve performance. If your machine has more pronounced troubles in function or performance, read through the troubleshooting guide. Find the problem description that best matches your trouble, and perform the recommended adjustment procedures. In some cases, more than one description closely resembles your problem. If so, perform each of the adjustment procedures in the easiest manner or most logical, whichever you prefer.

STARTING AND IDLING PROBLEMS

Pilot jet must be stock.

A). MOTORCYCLE WILL NOT START COLD

It is important to know that your hog will start and idle without your needle, slide, or main jets installed. DYNOJET kits do not alter your stock idle circuit, or the starting circuit.

1). Check for fuel in float bowl.
2). Check choke plunger operation.
3). Check to ensure throttle plate is closed. Check throttle cable play.
4). Check for vacuum leaks (i.e. V.O.E.S. valve hose, carb located in intake manifold).
5). Check that float bowl is not flooding over with gas (i.e. float damage, dirt in needle valve).

B). MOTORCYCLE WILL NOT START HOT

It's important to note whether the bike starts hard only when you let it sit for a period of time, or starts hard any time when hot. Both of these conditions are usually 'rich' problems. If you have trouble after the bike sits, then check for gas tank venting problems. Also check:

1). Float bowl is overflowing with gas.
2). Fuel mixture screw turned out too far.
3). Pilot jet not stock.

C). MOTORCYCLE IDLES ROUGH UNTIL IT REACHES NORMAL RUNNING TEMPERATURE

1). Fuel mixture screw set too 'lean'. Turning counterclockwise will enrich idle mixture.

D). MOTORCYCLE IDLES WELL UNTIL IT REACHES NORMAL RUNNING TEMPERATURE, THEN IDLES ROUGH AND POSSIBLY STALLS

1). Non-stock pilot jet.
2). Fuel mixture screw turned out too far.
3). Pilot air jet partially plugged.
4). Choke plunger or choke cable not returning to off position.

E). MOTORCYCLE STARTS BUT DOES NOT IDLE AT ALL

1). Fuel mixture screw turned in too far.
2). V.O.E.S. valve leaking or hose disconnected.
3). Pilot fuel jet plugged.
4). Manifold leak.
5). Idle turned down too far.

F). MOTORCYCLE STARTS BUT DOES NOT IDLE AT ALL (Bike seems to rev very slowly off idle with possible black smoke).

1). Fuel mixture screw turned out too far.
2). Pilot air jet plugged.
3). Choke not returning to off position.
4). Pilot fuel jet not stock.
5). Float lever too high.
6). Fuel leaking past needle valve.

G). LOW SPEED AND CRUISING PROBLEMS (Engine does not accept throttle past idle; engine accepts throttle but pops through carb; engine surges when holding steady speed; engine is very cold-blooded and choke has to be left on for a long time).

1). Check that main jet is drilled completely.
2). Check for vacuum leaks.
3). Check V.O.E.S. valve and hose for leakage.
4). Check float level too low.
5). Check accelerator pump operation. If the following check out, then raise needle one groove at a time and re-test.

ACCELERATION PROBLEMS

Proper idle must be established before off-idle troubleshooting is carried out.

A). ENGINE ACCELERATES FROM DOWN LOW, THEN GOES FLAT. SEEMS TO BE WORSE THE HIGHER THE GEAR USED.

1). Check needle installation. You must have 3 washers above the E-clip.
2). Check needle shroud installation.
3). Drag pipes will always cause this problem.
4). Poor choice of cam will cause flat spot in mid-range.
5). If the following check out, lower needle one groove at a time, and re-test.

B). ENGINE ACCELERATES TO RED LINE BUT FLATTENS OUT. SEEMS TO BE WORSE IN HIGHER GEARS AND WHEN HOT.

1). Check parameters on your fact sheet (i.e. main jet size for your application).
2). Check intake air flow. Some aftermarket filters don't flow as well as stock.
3). Check exhaust flow. Many aftermarket pipes flow much worse than stock, but may be noisier.
4). If the following check out, lower main jet size.

C). ENGINE SEEMS SLUGGISH WHEN ACCELERATING LOW GEARS OR WHEN COLD. SEEMS TO BE BETTER WHEN ROLLING ON IN HIGH GEAR.

1). Try restricting the air entering air filter. If problem gets better, then try going to a larger main jet.

D). BIKE FUNCTIONS NORMALLY WITH THE EXCEPTION OF POPPING WHEN DECELERATING.

1). Check for exhaust leaks.
2). Check for intake leaks.
3). If the above check out, then try enriching mixture screw slightly to make sure bike idles smoothly.