

Tech Tips #20  
1991 UPDATES  
AUGUST 1990

All Models

- Self cancelling turnsignals (new for XL/FX)
- New 401/402 series tires (all except FLST-CL, FLSTF). Aggressive looks with 50-60% higher tire life on the touring models. All tires have a new compound and design for excellent handling and adhesion qualities while improving tire life and wet weather traction.
- PPG Paint
  - \* PPG formulated new customized paints for Harley-Davidson for better paint quality, color selection, and match. Well known source in the automotive industry.
- New Ignition Module
  - \* Module provides for easier service through a single plug that also accommodates the V.O.E.S. switch. The module can be replaced without removal of fuel tank or other major components. Three modules will cover the 1991 product line (Big Twin, 1200, 883).
- "Bagging" of Crated Bikes
  - \* All 1991 models will come with a plastic bag around the entire motorcycle to prevent corrosion and the need for CRC spray. The bikes will look new and need only minor cleaning prior to delivery.

1340

- 1340 5 speed main drive needle bearings are new for 1991. They are the same as the new Sportser 5 speed bearing.
- Compensator sprocket new "spiral lock" nut allows higher torque loosening. A new horn is also common for 1991. Improved quality and less Dealer parts inventory.
- RA Starter System
  - \* Improved starting with more powerful motor (was 1.2kw now 1.4kw).
- Running Change
  - \* Improved engine breathing (25312-90 Breather Gear) This is the correct part number!
  - \* Reduces / eliminates oil carryover.
  - \* Will fit back to 84 1/2 Evo 1340 wet clutch models.
  - \* Potential for increased service sales for earlier models.

## FL

### - Improved:

- \* Passenger seating: More padding and new contour for greater passenger comfort and reduces tendency for passenger to slide forward. Also new wire routing as a result.
- \* Driver footboards: The three components that makes today's footboard are now molded into a one piece rubber unit. Better retention and uniformed look.
- \* Passenger footrest cosmetics: Cast aluminum board is finished in Black Wrinkle with machined highlights. Chrome footboard covers will be available to mount on the boards from P&A.
- \* Backrest mount: New mounts will eliminate the backrest rattle and vibration to improve the quality of ride and eliminate noise.
- \* Windshield attachment: Slotted windshields allow for easier installation, better fit and service of the FLHTC and Ultras.
- \* Luggage rack/handrail: The rack provides for a single screw mount for the FL seats as well as a clean looking rack assembly. Passenger handrails have been moved for rider comfort.
- \* All FLT models now have a grease fitting for the steering head bearings. Bearings should be greased and adjusted at 10,000 mile service. Bearings should be inspected/replaced at 50,000 miles. It should be noted that these are maximum service intervals.

## ULTRA

- Voice accuated intercom/repositioned passenger controls
  - \* The "VOX" allows greater sound quality by "opening up" only when the driver or passenger begins to speak. This provides crisp, clear communication without ambient noise while not in operation. Passenger radio controls are moved for easier access.

## FXR

- Black and chrome engine is new for FXRT, FXRS-Sp, and FXRS Convertible.
- Steering stem nut cover

## DYNA GLIDE STURGIS

- \* Unique ride/vibration control-ridged styling with highway smoothness.
- \* Unique oil tank locations
- \* Reduces possibility of "wet sumping"
- \* Easier maintenance (including transmission drain)

Dyna oil dipstick (DO NOT OVERFILL)

- \* Utilizes hot or cold acceptable operating range. (Do not add oil unless level is at or below add line).

## FX

- New black and chrome engine for FLSTF
- Improved driver footboards for FLST-CL and FLSTF

## XL

- Steering stem nut cover (1200 only)
- The highlight of the 1991 Sportster is the new 5 speed transmission. Drive ratios have been selected to reduce high gear cruising rpm's. Many parts have been commonized with the 1340 to reduce dealer parts inventory for servicing. Servicing procedures have been simplified from the Sportster four speed.
- Gates belt drive is now standard equipment on 1200 cc and 883 cc Deluxe models.
- The jiffy stand was moved further back in 1991 for improved customer access. Jiffy stand location on pre-1991 motorcycles prevents the 5 speed engine from being retrofit to earlier Sportster frames.
- The alternator has been relocated to the crankshaft. The faster spinning rotor now produces peak output at a lower engine rpm.
- Both the rear motor mount and the tappet blocks have become an integral part of the cases. The timing inspection hole has been moved to the right side for easier ignition timing adjustment. The camshafts are supported on the inboard side by bronze bushings for reduced noise.

## XI

- The oil filter mount is also an integral part of the crankcase assembly.
- The crankcase breather (umbrella valves) have been relocated to the rocker boxes. The system is completely internal and eliminates the breather hose from the gearcase to the airbox. The crankcase breathes directly through the backing plate bolts.
- Sportster pushrod tubes are now one piece construction. This reduces the potential for leakage.
- New easier to remove primary inspection covers for clutch adjustment and primary chain adjustment.
- Changes to the clutch and alternator changed the design of the primary chain adjuster. The mechanism is completely contained in the primary cover. Easy servicability is maintained with external adjustment. The primary / transmission fluid level was increased from 24 oz. to 40 oz.
- The redesigned Sportster clutch has an increase in the number of clutch plates. The material was also changed from cork to paper.