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**– July 1992 –  
#30**

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TECHNICAL TIPS #30  
JULY 1992

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ALL MODELS

PISTON PIN CLIP CHANGE

The piston pin clips used on all Evolution models have changed in color from silver to bronze. This was a manufacturing request for visual verification of installation during assembly.

The part number was changed from 22589-83 to 22589-83A.

The change occurred in production approximately in September of 1991.

MAIN DRIVE GEAR SPACER/ SEAL CHANGES

The diameter of the Main Drive Gear spacer, p.n. 33334-85 has been increased for greater surface contact against the main drive gear bearing. This also changes the main drive gear seal, p.n. 12050.

SERVICE NOTES

The two new parts must be used as a pair and cannot be intermixed with old parts. The parts are not hard to identify, the diameter change was so great, (approx. - .250"), that it would be pretty hard to mix up old and new.

The new parts will be included with both 1340 transmission cases and Sportster crankcase assemblies ordered from Parts & Accessories.

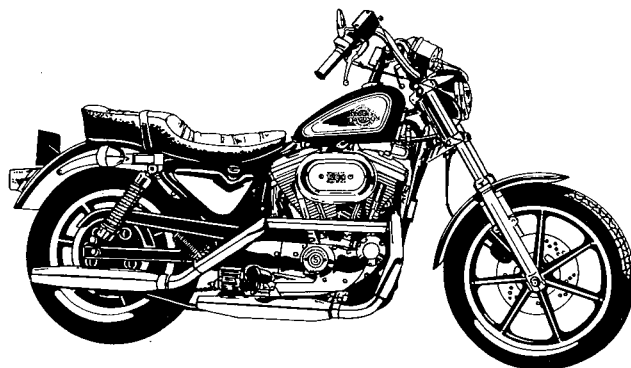
The old parts will be obsoleted and only new style parts will be sold. Please note the following changes to your Parts & Service literature:

Main Drive Spacer/ Seal Kit	33334-85A
contains:	
Main Drive Gear Spacer	33344-92
Main Drive Gear Seal	12067

## BASE GASKET MATERIAL CHANGE

Starting with vehicles built after May 26, 1992 a base gasket change was implemented. This change is intended to improve crush resistance and gasket sealability. Part number 16774-86C, the gasket can be retrofit to all earlier Evolution motorcycles.

## SPORTSTER MODELS

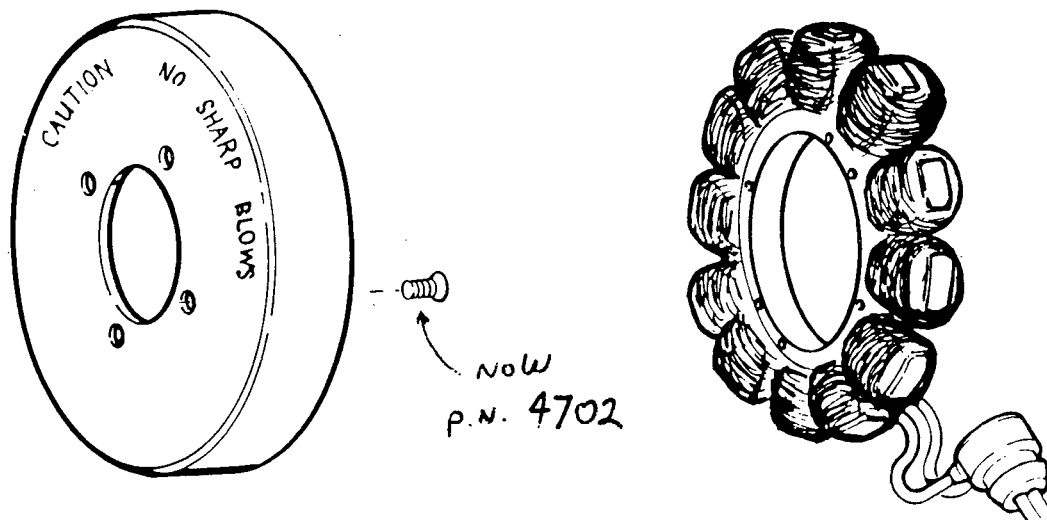


## ALTERNATOR ROTOR FASTENERS

The fasteners that secure the alternator rotor to the engine sprocket are changing. The countersunk Allen fasteners, p.n. 41191-74, will be changed to hex bolts, p.n. 4702.

The new rotor assembly with the new bolts can be ordered under part number p.n. 32403-89A

The bolt torque specification is still 90 - 110 in./lbs. and Loctite 242 is used.



## OIL PUMP DRIVE GEAR CHANGE

A material change to cast iron for increased service life was implemented on April 23, 1992.

The new gear has a part number change to 26318-88A. This part will retrofit to all Sportster models, 1988 and later.

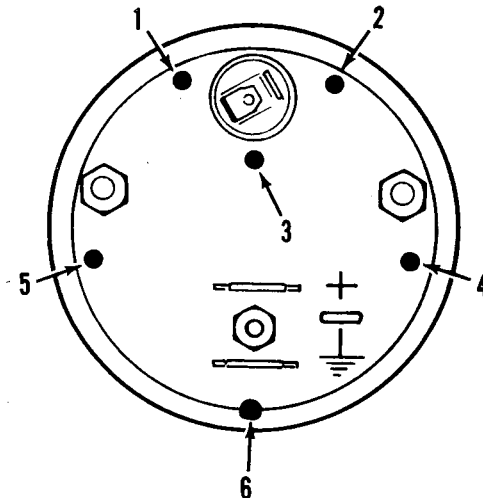


1340 cc MODELS



## FAIRING INSTRUMENT GAUGE CONDENSATION - FLT

To reduce the potential for gauge condensation the number of vent holes has been increased to 6 per gauge. This occurred as a running 1992 model change. While it is normal for some condensation to occur. Any condensation should dissipate in a few hours. Continued condensation that persists for days would be unacceptable. If you are experiencing unresolved clouding/ condensation with the six hole instrument, contact the Customer Service Dept.- Wholesale Delivery Division, (formerly Technical Service)



## SHIFT PAWL ADJUSTER

Starting with transmission number 92-156-136 the pawl adjuster was changed from a Allen adjuster to a 1/4" 12 pt. adjuster. This was timed to be a change at the the beginning of the 1993 model year, but a few 1992's will be built with the new adjuster.

A new service/ adjusting tool has been approved and released for production by Kent-Moore Tool. It will be shipped to all Essential tool dealers in July.

## MISCELLANEOUS

### TECHNICAL TIPS PREVIOUS ISSUES NOW ON MICROFICHE

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Back issues of TECH TIPS are now going to be available on microfiche !! Issues # 1-29 are being printed and will be sent to each dealer through dealer mail. Two complete sets will be sent to each dealer.

## CM RIMS HISTORY / TIRE AVAILABILITY

This is the time of year that the Wholesale Delivery and Retail Delivery departments recieve a lot of calls about older motorcycles equipped with wheel rims having a "CM" profile and the availability of tires to fit those rims. People are restoring older vehicles, people buy used bikes and begin to look for replacement tires. Then.....the problems begin.

But first, a little background information and history are in order. Today, almost all motorcycles use wheels that have the industry standard "TL" rim profile. However, for a long period of time some Harley-Davidson motorcycles were produced with the "unique - to - Harley" CM rim profile. This included Sportsters up to 1978 and FX/FXE models until 1979; both 18' and 19' wheels. The problem is that motorcycles with these rims required a special tire; a "tapered bead base tire". Harley used OEM tires produced by Goodyear and for a short time, some Yokahama tires were used.

Neither of these tires are in production today. Fitting tires with a bead profile not for CM rims is NOT recommended, as the tire could come free of the rim during high speed operation!! Wheel rims with this special rim profile will have the "CM" rim identification stamped on the rim's circumference.

If correct replacement tires are not available, the recommended course of action is to change the wheels and/ or rims to later style ones that are compatible with industry current tires.

Remember, this is important and true of any motorcycle; if you as a technician knowingly install mismatched tires, you may be placing yourself into a serious liability situation!