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EVO: Engine Mechanicals - Sub-01G

1986-Up Sportster Cam Cover Pics

Part Numbers

The part number never shows up on the cover.

The only time you'll see a part number for a cam cover is in the parts books, on a receipt, or on a shipping box.

Part numbers are created to move the product. Casting numbers are created to distinguish the part. The reason for part number changes (within same casting#s) may simply be for surface finishes for different models or items included with the cover.

Click Here to see a listing of cam cover part numbers in the Sportsterpedia.

Casting Numbers

The casting number is not the part number.

You'll see multiple year cam covers all with the same casting number but they may have several different part numbers between them.

The reason for casting number changes usually involve different model features needed to be cast into the cover for certain year cases.

Casting numbers can be found on all OEM cam covers on the inside (cam side) of the cover.

L1984-1990 Sportster cam covers: casting number (25222-84A). 1991-1994 Sportster cam covers: casting number (25222-89). 1995-1997 Sportster cam covers: casting number (25230-95). 1998-1999 Sportster cam covers: casting number (25230-98). 2000-2003 Sportster cam covers: casting number (25230-98A). 2004-E2007 Sportster cam covers: casting number (25230-04). L2007-Up Sportster cam covers: casting number (25230-04A).

Date Codes

Model Season

When deciphering dates of parts, be sure to take the model year production season into account.

HD Approximate Model Year Production Season



Circle Date Code (1986-2006)

1986-2006 cam covers have a circle date code (2004-up cam covers also have a machining date pin stamp).

The circle date code represents the casting date (not the year the cover was designed to be used on or machined for bushes etc.)

The circle date code consists of a circle cast into the inside of the cover with 12 dividers around the circle representing 12 months of the year.

The last 2 numbers of the year the cover was cast appears in the middle of the circle followed by a series of dots in dividers around the circle.

You can't interpret the year in the circle to be the year model the cover was made for.

For instance, you may find that a 1990 cover was actually created in 1991 or even 1993 as in the pic below.

The dots in the dividers provide the month the cover was cast but the pattern for the dots is inconsistent at times.

There may be a dot in top center and a dot in bottom center (2 dots total) and that could be interpreted a few different ways.

Others have multiple dots starting toward the top or bottom arranged within the dividers around the circle.

In general, the number of dots should follow the model season numbering system for the year.

(2 dots should be May and 7 dots should be July etc.)

But due to the inconsistencies of the dots, you may have to view other features for a more positive date match.

L1984-1990 covers:

These all carry the same casting number and judging by casting numbers alone;

The main visual difference between these covers is whether there is a circle date code under the casting number or not.

L1984-1985 casting# (25222-84A) is a standalone number cast on the inside front, not far from the breather valve with no circle date code.

1986-1990 casting# (25222-84A) is in the same spot but all have a circle date code under the casting number (date of casting is in the circle).



Machining Dates (2004-up)

2004-up cam covers have a several numbers pin stamped on the inside of the cover.

Original location was on the rear near the oil tank breather fitting.

Later covers were stamped on the inside front in the round portion behind the oil filter mount.

There are 2 sets of numbers with the first being the month, day and year of machining (holes drilled, bushings installed/reamed etc.)

The next set of numbers are for unknown reasons at this time.

The unknown numbers may be production, control or operator numbers and possibly a mix of the same.

2004-2006 covers also have a circled date stamp that was faded out for model season 2007.

As per usual, the remainder of 2006 covers were used out in the early part of the 2007 season (running change).

So 2004-2006 and some 2007 covers will have both machining dates and casting dates.

1986-1990 Cam Covers

The same HD part number (25219-86) was used for 1986-1990 cam covers.

The casting number is (25222-84A) for all L1984-1990 cam covers and all have a circle date code below the casting.











2004-Up Cam Covers

There are only 4 cam cover part number changes on 2004-2016 Sportsters, and most likely beyond and not counting XR models.

They are the same cover with different finishes: polished, chrome, black or gray.

The XR cover is a completely different design.

Figuring that there was a casting/design change in 2007, that leaves a total of 2 versions of these covers

not counting surface finish or XRs.

2007 Casting number change:

The same casting design (25230-04) was used from 2004 through an early 2007 running design change to casting# (25230-04A).

The casting number change has a direct correlation to the removal of casting bumps in the feed galley of the cover.

Casting# (25230-04) has the casting bumps in the feed galley. Casting# (25230-04A) does not have the casting bumps in the feed galley.

In 2007, the MoCo made a drastic change to the gerotor sizes in the oil pump. Both feed and scavenge gerotor sets got much taller than before.

As a result, the scavenge volume increased and according to measurements, the feed side volume was slightly reduced compared to 2006-earlier design.

With 2007 oil pumps having slightly less feed volume, it's possible the removal of casting bumps in the cover were to free up oil flow.

Click Here to read more on the Volume and Flow Comparison between 2006 and 2007 oil pumps in the Sportsterpedia.



2004-E2007 Covers

L2007-Up Covers

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1)

photo courtesy of NitroFrankie Go-Fast HD, Ebay Items for Sale Page 2, 3, 4, 5, 6, 7, 8)

photo courtesy of DeadpartsMC, Link to Ebay Store

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