

Table of Contents

- REF: Engine Mechanicals - Sub-03A** 3
- Ignition Cover Mods and Aftermarket Covers** 3
- Custom / Homemade Covers** 3
 - Make Your Own Ignition Cover* 3
 - Commercial Iron Cross with Green Backdrop* 4
 - Homemade Finned Ignition Cover* 5
- Pics of Homemade Covers** 6
- Pics of Aftermarket Covers** 7

[Go To Technical Menu](#)

REF: Engine Mechanicals - Sub-03A

Ignition Cover Mods and Aftermarket Covers

See also:

- [Chopping the Cam / Gearcase Cover](#)
- [Pics of Cam / Gearcase Cover Mods](#)
- [Pics of Sprocket Cover Mods](#)
- [Polishing Aluminum](#)

Custom / Homemade Covers

Make Your Own Ignition Cover

Trace your existing cover out onto the material of your choice (aluminum used here). ¹⁾



Rough cut the round disc. ²⁾



Drill the mounting holes.
Then make a jig to hold the disc into a lathe or drill press.
Turn or file the edges to the target diameter and with the finish of your choice. ³⁾



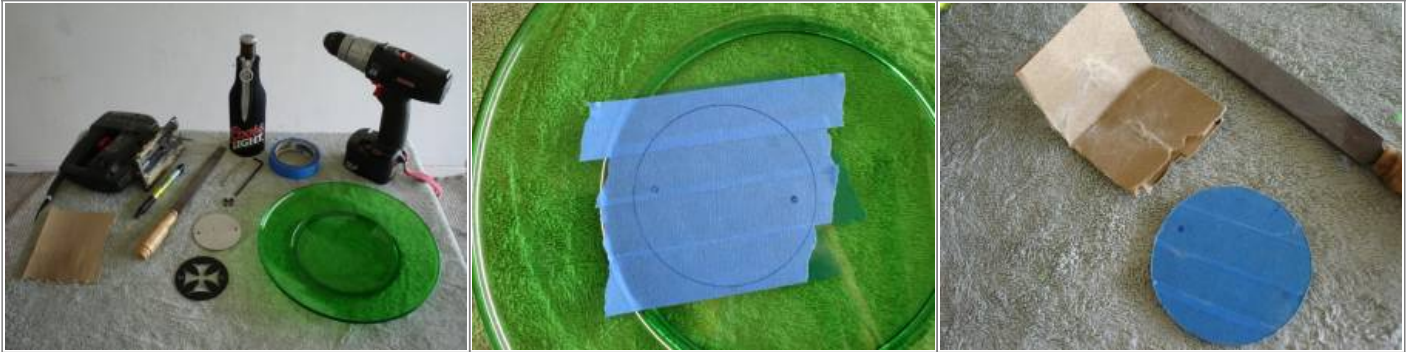
Commercial Iron Cross with Green Backdrop

- Parts:
 - 1 green acrylic plate from any dime or thrift store.
 - Aftermarket ignition cover with the iron cross emblem.
- Tools:
 - Jig saw with the wider teeth cutting bit.
(the fine bit teeth will melt the plastic before cutting it)
 - A file to smooth out the edges.
 - A drill to make the mounting holes.
 - Painter's tape to protect the acrylic.
 - A marker to outline the material.

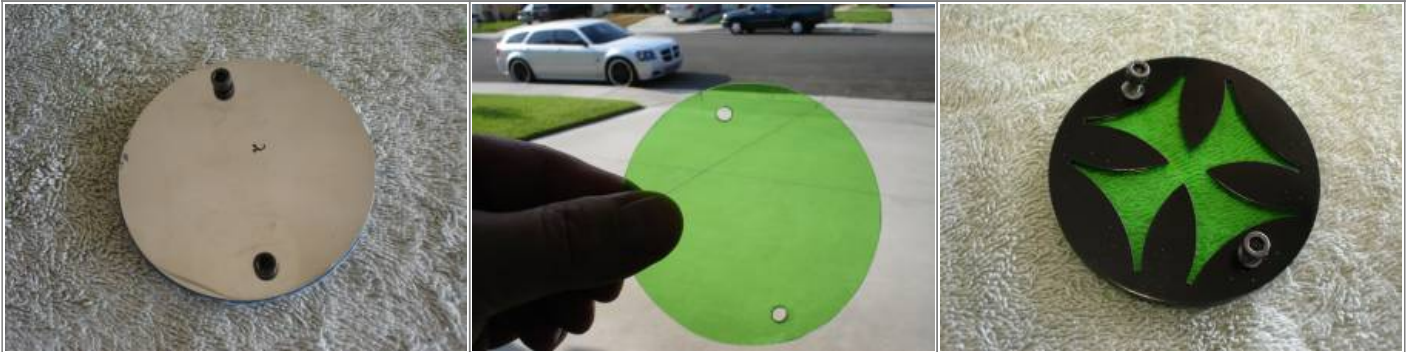
Acrylic is hard to work with. If you go too fast it melts back together.
If you go too slow it cracks.
The steel iron cross overlay will hide imperfections on the edges of the acrylic. ⁴⁾



The backdrop is made from a cheap acrylic plate.
Trace the cover onto a taped section of the plate and cut it out with the jigsaw. ⁵⁾



Drill the mounting holes.
Then bolt it to the original cover to act as a guide for filing the edges smooth.
The blue overhang below is the material that had to be removed. ⁶⁾



Homemade Finned Ignition Cover

Start with some aluminum stock ⁷⁾



Drill the mounting holes ⁸⁾



Make a backing plate as above to fit in a lathe. ⁹⁾



Bolt the backing plate to the disc, chuck the plate up into a lathe and cut it down to right diameter. ¹⁰⁾

The back of this one was chamfered. ¹¹⁾



Next, put the disc on a milling machine to cut the fins. ¹²⁾



Polish out the machining marks and install. ¹³⁾



Pics of Homemade Covers

Ignition cover made from a recycled burnt out .010 over piston ¹⁴⁾



Timing cover made by drumballer ¹⁵⁾

As sold to flourman ¹⁶⁾



Brass ignition cover. ¹⁷⁾ ¹⁸⁾



Pics of Aftermarket Covers



Timing cover by jrogers329 ¹⁹⁾



Timing cover by biknut ²⁰⁾



Timing cover by Rollbar ²¹⁾



Timing cover by biknut ²²⁾



Timing cover by rottenralph ²³⁾



Timing cover by sportytrace ²⁴⁾

Go To Technical Menu

1) , 2) , 3)

photos by bustert of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-general-discussion-and-problems/191167-sportster-primary-material?highlight=jig#post4123797>

4) , 5) , 6)

photos by Johnny Wolf of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-accessories/54611-since-everyone-seems-to-be-going-green-timing-cover-mod?t=263640>

7) 8) 9) 10) 11) 12) 13)

photo by Freewheeler of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-era-specific-and-model-specific/ironhead-sportster-motorcycle-talk-1957-1985/173940-homebrew-points-cover?threadid=1865634>

14)

photo by Inked01 of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-era-specific-and-model-specific/ironhead-sportster-motorcycle-talk-1957-1985/140988-new-ignition-cover?t=1528258>

15)

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-general-discussion-and-problems/64458-i-made-timing-covers?t=403831>

16)

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-general-discussion-and-problems/64458-i-made-timing-covers/page4?t=403831&page=4>

17)

photo by AussieGazza of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-motor-engine/sportster-motorcycle-engine-conversions/87710-aussiegazzas-rebuild/page10?t=692835&page=10>

18)

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-motor-engine/sportster-motorcycle-engine-conversions/87710-aussiegazzas-rebuild/page16?t=692835&page=16>

19)

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-styles/sportster-motorcycle-custom-finishing/47449-i-found-a-custom-timing-cover/page2?t=180329&page=2>

20) 23)

<http://xlforum.net/forums/showthread.php?t=180329&page=2>

21)

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-era-specific-and-model-specific/frame-mount-evo-sportster-talk-1986-2003-models/173216-timing-cover-attachment-reattachment?t=1859176>

22)

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-styles/sportster-motorcycle-custom-finishing/47449-i-found-a-custom-timing-cover?t=180329>

24)

<https://www.xlforum.net/forum/vendors/figure-machine/151606-thanks-for-the-custom-timing-cover?t=1636813>

From:

<https://sportsterpedia.com/> - **Sportsterpedia**

Permanent link:

<https://sportsterpedia.com/doku.php/techtalk:ref:engmech03a>

Last update: **2024/01/14 21:15**

