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REF: Tools - 115

Clutch Hub / Spring Compressor Tools

4 Speed (1990 and earlier) Tools

Homemade



4 Speed Clutch Hub Tools ¹⁾



Clutch Hub Tool ²⁾

Two pieces of timber screwed together, some 1/4" UNC threaded rod, 1/4" nuts and washers. It does not have the center screw like the factory tool. Just tighten down the nuts on the threaded rod to compress the clutch springs. ³⁾

This one uses an auto harmonic balancer puller as a center torque shaft

Clutch spring compressor⁴⁾Clutch spring compressor⁵⁾Clutch spring compressor⁶⁾

5 Speed (1991-later) Tools

Homemade

There are a number of ways to accomplish the compression of the Clutch Diaphragm Spring. Some of which rely on the clutch adjusting screw (ramp assembly stud) to pull against to compress the spring.





7)

3" PVC cap w/ 5/16"x24 bolt or all-thread, coupler, nut and washer.



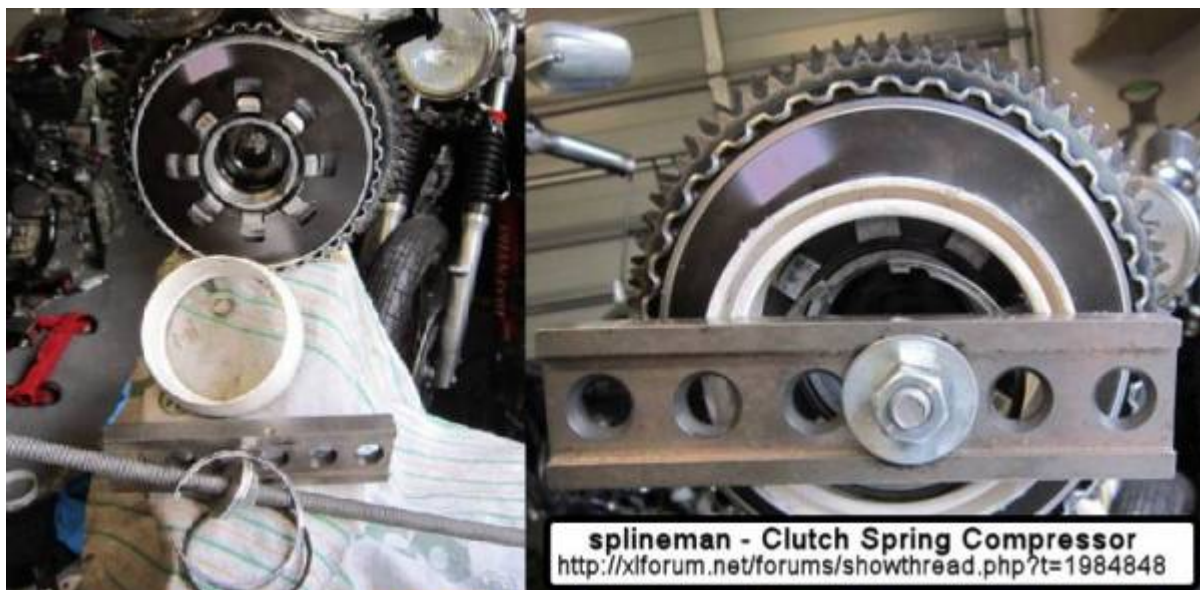
8)



9)



However, if the pressure plate is cracked / broken or the adjuster stud can't be otherwise used, below are some other ideas to compress the assembly.





10)



isiahtites - Clutch Diaphragm Compression Tool
<http://xiforum.net/forums/showthread.php?t=77715>

Also, here is a commercial compression tool modded for use without the adjustment stud.



11)

12)

Here is some out of the box thinking with a used pressure plate placed under the commercial compression tool.

This essentially moves the pressure point over the tips of the spring instead of compressing from farther out on the spring.

So the tool now compresses the fingers first giving some initial room between the fingers and the rest of the spring body.



13)



14)



15)



16)



17)



18)

Commercial

**Barnett 317-30-30001
Clutch Compression Tool**



19)

Motion Pro clutch tool dims



20)



21)



22)



23)



24)



25)

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1)

72 Ironhead XLH

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-era-specific-and-model-specific/ironhead-sportster-motorcycle-talk-1957-1985/184708-first-time-reassembling-transmission/page2?t=1981137&highlight=sprocket+lock&page=2>

2)

photos by arkyboy of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-era-specific-and-model-specific/ironhead-sportster-motorcycle-talk-1957-1985/63858-special-tools/page6?t=395586&page=6>

3)

Hopper of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-era-specific-and-model-specific/ironhead-sportster-motorcycle-talk-1957-1985/63858-special-tools?t=395586>

4)

photo by Hopper of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-era-specific-and-model-specific/ironhead-sportster-motorcycle-talk-1957-1985/63858-special-tools?t=395586>

5)

photo by IronMick of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-era-specific-and-model-specific/ironhead-sportster-motorcycle-talk-1957-1985/189718-1982-ironhead-transmission-removal-w-pics?threadid=2023217>

6)

photo by Tribulation of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-era-specific-and-model-specific/ironhead-sportster-motorcycle-talk-1957-1985/63858-special-tools/page18?t=395586&page=18>

7)

photos by Dirty Don of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-drivetrain/sportster-motorcycle-transmission-clutch-primary-secondary-drive/148093-homemade-clutch-spring-tool?threadid=1608837>

8)

photo by trainman of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-era-specific-and-model-specific/ironhead-sportster-motorcycle-talk-1957-1985/63858-special-tools/page16?t=395586&page=16>

9)

photo by DaytonaSportster of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-drivetrain/sportster-motorcycle-transmission-clutch-primary-secondary-drive/162159-home-made-clutch-tool?t=1742779>

10)

photos by Jt1200r of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-drivetrain/sportster-motorcycle-transmission-clutch-primary-secondary-drive/29955-06-clutch-install/page14?t=49915&page=14>

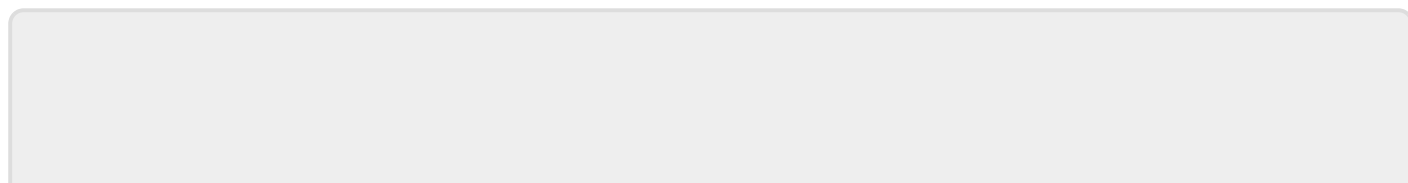
11) 12) 13) 14) 15) 16) 17) 18)

photo by harley506d of the XLFORUM

<https://www.xlforum.net/forum/sportster-motorcycle-forum/sportster-motorcycle-drivetrain/sportster-motorcycle-transmission-clutch-primary-secondary-drive/198254-huge-cock-up-xr1200-clutch-mod/page5?t=2074994&page=5>

19) 20) 21) 22) 23) 24) 25)

photo by Hippysmack



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