

Troubleshooting a Orion AccuFocus electronic telescope focuser

Matthias Bopp, December 18th 2010

A friend of mine had experienced problems with his Orion AccuFocus unit and I offered help. He sent the hand-controller to me and I found out that the potentiometer, which determines the speed of the focus motor was no longer operating properly. As I did not find the exact replacement potentiometer I inserted a slightly different version and as I already had opened and inspected the unit thought I will document the schematic and inside of the focuser in case anyone else might need this information in the future.

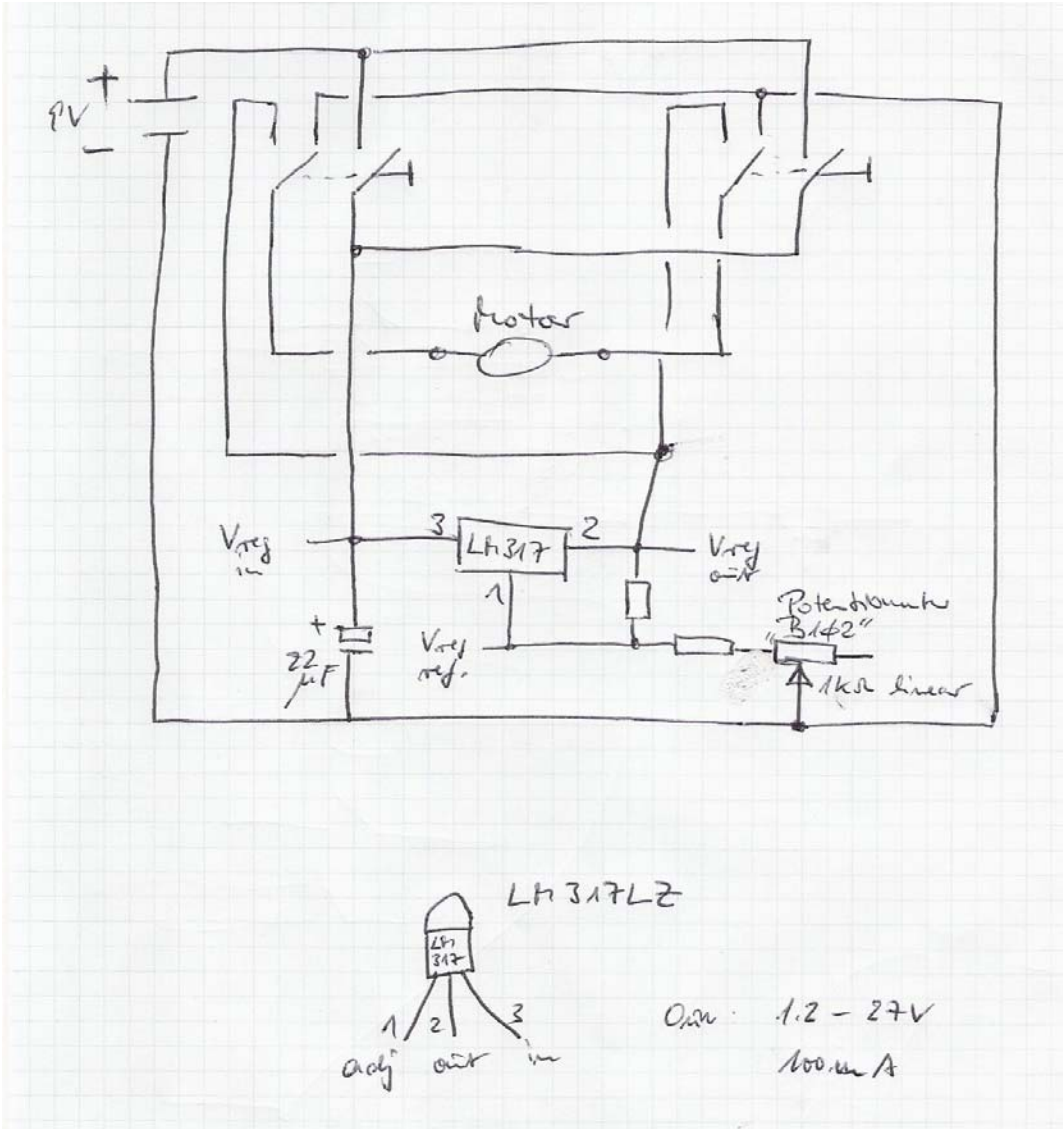


Here is a short description of the Orion AccuFocus Electronic Telescope Focuser:

- Use the pushbutton hand controller for smooth, precise focusing without vibration
- Choose speeds from coarse to very fine
- Powered by one 9-volt battery (included)
- Also includes bracket, hardware, and coil cable
- DC motor installs easily and works with many telescopes:
 - Orion SkyQuest Dobsonian telescopes (except the Orion SkyQuest XT4.5 Classic Dobsonian Telescope)
 - Orion SkyView Pro telescopes (except for Maksutov-Cassegrain and Schmidt-Cassegrain telescopes)
 - All Orion AstroView telescopes
 - Orion Atlas 8 and Orion Atlas 10 Reflector telescopes
 - Orion Explorer 80 and 90 Refractor telescopes
 - Orion ShortTube 80 Refractor telescope
 - Orion StarSeeker 80 and StarSeeker 100 Refractor Telescopes
 - Orion 80mm ED Refractor telescope
 - Orion 100mm ED Refractor telescope
 - Orion 120mm ED Refractor telescope



Here is a schematic of the Orion AccuFocus hand-controller:

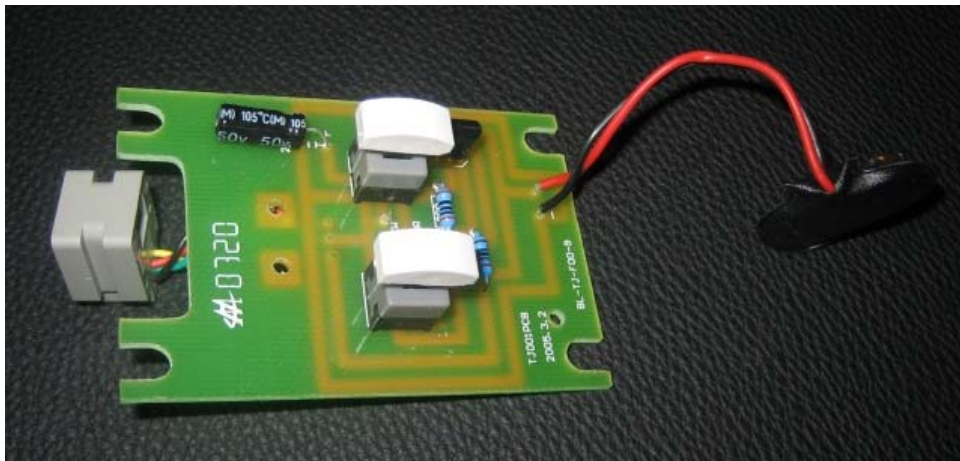


Defective potentiometer (1kOhm, linear)



Replaced potentiometer (1kOhm, linear)

Here are some pictures of the hand-controller:



If you have any questions please feel free to contact me at [dd1us\(at\)amsat.org](mailto:dd1us(at)amsat.org).

Best regards

Matthias

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