



Advanced Innovative Machinery

INSTRUCTIONS

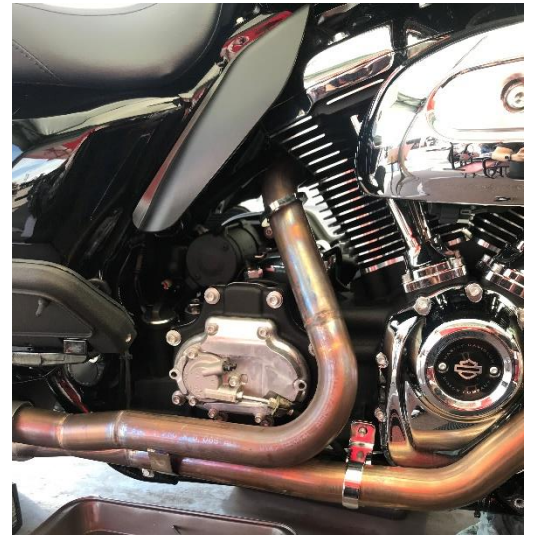
Light Force Clutch Slave Cylinder – LF003

1. Loosen the exhaust system to where you will be able to move it freely to gain access to unbolt the transmission end cover. Removing the exhaust heat shield is recommended as well to prevent damage (**Picture 2**).
2. Remove the 2 (3/16) bolts on the left and right ends retaining the end cover in place (**Picture 3**).
3. First break loose the clutch line, before removing the factory unit. This will make removal of the unit much easier.
 - a) Please use a (7/16) flare nut wrench if possible, to avoid rounding out the nut. Be careful with the fluid as it is **VERY CORROSIVE** and if it contacts any painted surface it can cause severe damage.
4. Carefully remove the slave cylinder by loosening the 3 (3/16) bolts that hold the unit in place.
5. After the removal of the slave cylinder from the bike. Loosen the clutch line from the slave cylinder carefully.
6. Install the Light Force Slave Cylinder in the reverse order of the removal process quickly to prevent in any excess fluid loss (**Picture 4**).
 - a) Be careful when installing the unit as it may be difficult to line up. Install the unit straight to ensure proper seating of the outer o ring.
7. With the Light Force seated correctly flat up against the transmission cover. Torque the three (3/16) bolts to approximately 8-10 ft-lbs. (11.2-13.6 Nm). (**Picture 5**).
8. Tighten the clutch line to the new Light Force Slave Cylinder.
 - a) Please thread the clutch hose by hand to ensure that there is enough thread engagement before you using any tools for proper torqueing. This will eliminate any issues involving cross threading.
9. **Do not reinstall the cover yet.** Once everything is on tight and properly torqued, next is the bleeding procedure and all can be done by the bleed screw at the slave cylinder.
 - Please use 10mm flare nut wrench to you loosen and tighten the bleed screw.



Tools Need for LF installation:

- Philips Head Screwdriver
- 10mm, 3/8 & 7/16 Flare Nut Wrench
- 3/16 Allen Head Wrench
- H-D Premium DOT 4 PN: 41800770
- Shop towels



PICTURE 2



PICTURE 3

- Please use **OE Harley Davidson DOT 4** recommended fluid. Please avoid any spills as DOT 4 fluid is high corrosive.
 - Open the clutch reservoir and replenish what was lost during the removal process.
 - Keep the fluid reservoir as level as can be to ensure proper levels and proper bleeding.
 - **ALWAYS** keep the fluid level topped off during the bleeding procedure. Failure to do so will result in air locks and multiple bleeding procedures will be advised. Keep the fluid above the arrowed mark on **(PICTURE 6)**.
 - Please use to bleeder screw that is provided on the new Light Force Slave Cylinder. Stock bleeder screw will not fit.
 - AIM Corps recommended plate movement is **(0.070 in)** measured with a dial indicator measured from the center of the push rod on the clutch side.
10. Once the bleeding procedure is complete and you have confirmed that there are no further air locks. Confirm the clutch lever pull, and make sure the clutch properly engages and disengages. The clutch should feel significantly lighter than previous and should be very apparent. The clutch engagement point in the lever may be closer to the grip after this upgrade.
 11. Torque the bleed screw to **50 to 80 inch/lbs.** when done bleeding.
 12. After inspection is finished you may now install the transmission end cover. Please align the rubber gromet that is on the clutch line and orient it accordingly to clear the cover and maintain proper isolation between the transmission end and the cover with no contact.
 13. Reinstall the exhaust / heat shield if removed or loosened.
 14. Test ride. Please make sure that the clutch is fully disengaging and engaging properly. Stop immediately if there is any issue with fluid leak etc.
 15. After your first ride, please check the unit for leaks, and check the torque between all of the bolts.



PICTURE 4



PICTURE 5



PICTURE 6

If you have any further questions or concerns, please email or call.

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DISCLAIMER: This product is meant to be used with factory components. Factory grips, lever, OEM and or Screamin eagle clutch plate kits are highly recommended for proper operation of the Light Force. Any other aftermarket components may have compatibility issues and or improper clutch operation. Please consult with us if you have any questions on regarding your setup.