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Instruction Sheet For Tool No. 5518

Shifter Pedal Shaft Bushing Removal and Installation Tool

No. **5518** - *Removes and installs shifter bushings on 1985-present rubber mount FLH inner primary housings.*



TOOLS AND PARTS RECOMMENDED

- 3/16" Allen wrench
- 5/8" open end wrench
- Brass hammer
- New Shifter shaft bushings H-D No. 33713-85B - 1985-2000 or No. 42642-00A - 2001-present
- Service Manual for year and model bike being serviced
- Press fit lubricant

Wear safety glasses or a full face shield. JIMS is not and cannot be responsible for your safety and quality of your work. If in doubt of any procedures, take motorcycle to a qualified motorcycle repair shop.

PARTS AVAILABLE SEPARATELY

NO.	QTY.	DESCRIPTION	PART NO.
1	1	REMOVER, SHIFTER SHAFT BUSHING	5518-1
2	1	INSTALLER NUT, SHIFTER SHAFT BUSHING	5518-2
3	1	INSTALLER, SHIFTER SHAFT BUSHING	5518-3
4	1	SCREW, 5/16-18X4" BHCS, FULL THREADS	5518-4
5	1	WASHER, 5/16" AN	1216
6	1	INSTRUCTION SHEET	5518-IS

INSTRUCTIONS FOR 1999-PRESENT

1. Remove shifter shaft from inner primary case pivot bore by removing inner and outer shift levers following H-D service manual.
2. Using driver No. **5518-1** and brass hammer, drive both bushings out of inner primary housing toward engine. The bushings will drop out of shifter shaft bore in space between inner primary and engine. Make sure to pull back driver about 1" and grab first bushing and remove as soon as it has clearance. Continue driving second bushing until it can clear and drop free.
3. Clean shifter shaft bore in preparation for bushing installation.
4. Apply press fit lubricant to new bushings and make sure bore of inner primary is clean and lightly lubricated. Lubricate threads of screw No. **5518-4**.
5. With a new bushing No. **42462-00A** on No. **5518-2** inner installer nut and a new bushing on No. **5518-3** outer installer, insert screw No. **5518-4** with washer No. **1216** through outer installer and bushing, then through inner primary bushing bore, through next bushing and thread into No. **5518-2** inner installer nut. Thread screw on until hand tight and new bushings are just starting into inner primary shifter pivot bore.
6. While holding installer nut No. **5518-2** with a 5/8" wrench, tighten screw No. **5518-4** with 3/16" Allen wrench until both bushings are installed flush. The inner and outer drivers will bottom out on inner primary housing shifter shaft bore. Remove bolt, washer, inner, and outer installers.
7. Install shifter shaft with inner and outer shift levers following H-D service manual.
8. Verify transmission shifts properly on bike lift before test riding on public streets.

INSTRUCTIONS FOR 1985-1998 EVOLUTION MODELS

1. Remove shifter shaft from inner primary case pivot bore by removing inner and outer shift levers following H-D service manual.

CAUTION: Wear safety glasses over your eyes.
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2. Remove zerk grease fitting from inner primary pivot bore.
3. Using driver No. **5518-1** and brass hammer, drive both bushings out of inner primary housing toward engine. Pay attention to first bushing, watching to make sure it doesn't get too close to engine case. When is about 1/8"-1/16" away, pull driver back about 1" and grab bushing with your fingers. You should be able to wiggle and remove bushing. The clearance between engine case and inner primary is just enough to remove first bushing.
4. After first bushing is out, continue driving No. **5518-1** driver, watching to be sure that the tip doesn't contact engine case. When driver is almost touching case, stop.
5. Clean and lubricate shifter shaft bore and start driving a new lubricated No. **33713-85B** bushing into bore. New bushing will contact old bushing. Continue driving new bushing. It will push old bushing out toward engine case. When old bushing is about 1/16" from engine case, pull back on driver at least 1". Grab old bushing and wiggle it and it will drop free of inner primary shifter boss.
6. Drive first bushing slowly, paying attention to make sure it does not protrude past inner primary shifter boss bore. Stop when edge is flush to shifter pivot bore.
7. Drive the second bushing in, paying attention to make sure it does not push in past edge of inner primary bushing bore. Stop when bushing edge is flush with bore of inner primary.
8. Install shifter shaft with inner and outer shift levers following H-D service manual. Install zirk fitting and lubricate with a grease gun. Pump until grease just starts to appear at edges of pivot shaft bore.
9. Verify transmission shifts properly on bike lift before test riding on public streets.

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