



INSTRUCTIONS

-J00455

REV. 9-24-99

Kit Number 71428-90B

ROUND-KEY IGNITION SWITCH KIT

General

This kit is designed for installation on the following motorcycles:

- 1975 and later XL models
- 1982 and later FXR models
- 1973 – 1985 FX models (except FXST and FXWG)
- 1991 to 1996 FXD's (except FXDWG)

QTY	DESCRIPTION
1	Ignition switch assembly, round key
1	Ignition switch mounting nut
2	Keys, ignition switch
3	Connector, butt splice, blue
2	Connector, butt splice, yellow
1	Tubing, heat shrink
1	Cable strap
1	Label, ignition switch, early style XL/FXR/FX
1	Label, ignition switch, FXD
1	Label, ignition switch, later style XL/FXR

WARNING

To avoid accidental start-up of motorcycle, and possible personal injury, disconnect the battery cables (negative cable first) before performing any of the following procedures. If the battery should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion resulting in death or serious personal injury.

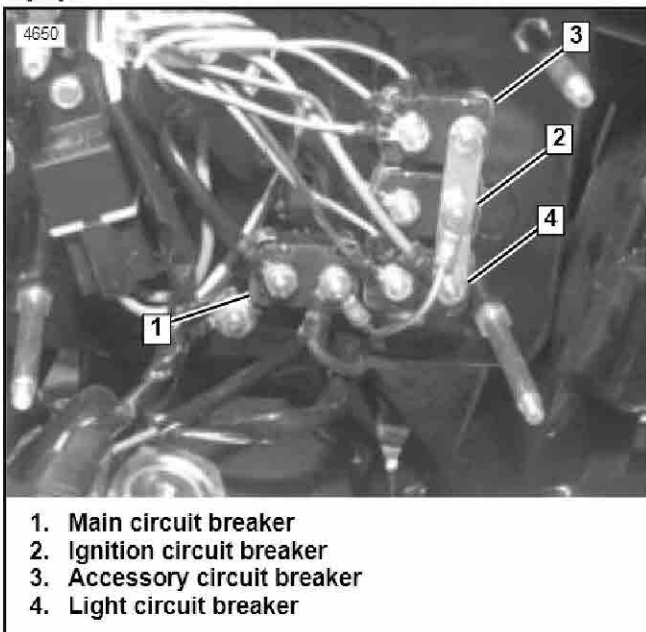
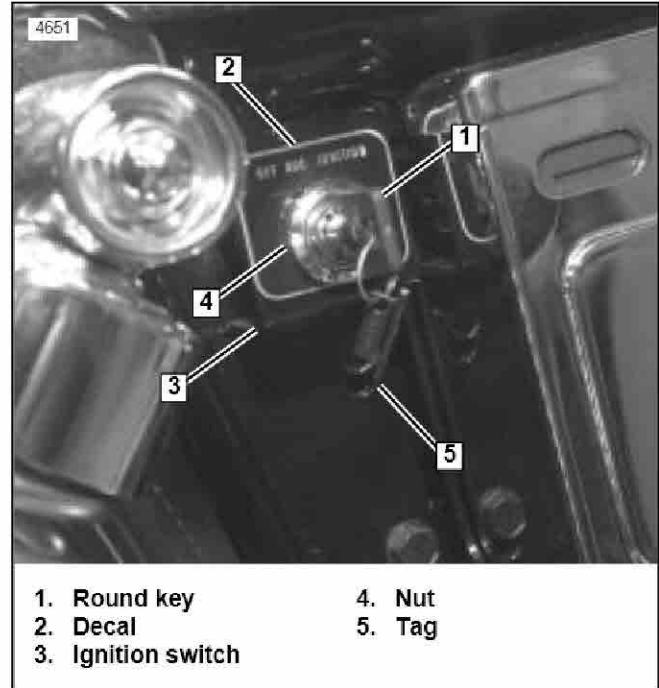


Figure 1. Circuit Breakers and Connections



- | | |
|--------------------|--------|
| 1. Round key | 4. Nut |
| 2. Decal | 5. Tag |
| 3. Ignition switch | |

Figure 2. Round Key Ignition and Decals Installed (Right Side of Vehicle)

Installation— 1991-1994 FXD Models

1. Remove seat and electrical panel cover. Remove ignition module mounting plate. Disconnect battery, negative cable first.
2. Remove electrical panel cover and ignition module mounting plate.
3. Disconnect switch wires at circuit breaker. Note where wires are connected. Remove old switch. **On 1991-1993 FXD models only**, remove existing switch label and install new rectangular ignition switch label (See Figure 2). **On 1994 FXD models**, reuse original ignition switch label.
4. See Figure 1. **On 1991-1993 models**, remove buss bar from between ignition and accessory circuit breakers (2 and 3). **On all FXD models**, install new switch red wire on silver post of main circuit breaker (1).
5. **On all FXD models**, install new switch red/black wire on copper post of ignition circuit breaker (2).
6. **On all FXD models**, install new switch red/gray wire on copper post of accessory circuit breaker (3).
7. Use cable strap as required to secure wires.




Key Positions Using This Kit <i>Note: Key position functions may differ from those of original switch</i>	Position #1 	Position #2 	Position #3 
All 1994 and Later XL and FXR Models, and all 1991 and later FXD Models (except FXDWG)	OFF – All electricals. Key removable.	Hazard warning flasher, brake light, and horn may be activated. Instrument lights are ON. Key removable.	Ignition and lights ON. Key not removable.
1975-1993 XL, 1982-1993 FXR (except 1986-92 FXRT/FXRD w/radio), and 1973-1985 FX (except FXST and FXWG)	OFF – All electricals. Key removable.	OFF – All electricals. Key removable.	Ignition and lights ON. Key not removable.
1986-1992 FXRT/FXRD with radio	OFF – All electricals. Key removable.	Accessories ON. Key removable.	Ignition, lights, and accessories ON. Key not removable.

Figure 3. Key Positions for Various Models

- The word "TOP" is marked on top of switch body to allow for proper positioning of switch. Install switch and tighten nut.
- Remove and save key code tag located on key ring with two keys. Key code is not marked on keys.
- Reinstall ignition module mounting plate and electrical panel cover.
- On FXR and XL models, see Figure 3A. Trim off "flats" from new round ignition switch label, Part No. 71550-94 (same style label as original), to make center hole into a perfect circle. This will allow you to rotate the label so that the new switch key positions will properly match up with the label indications. This is required since the new switch key positions are rotated 30° clockwise from the original flat key switch key positions. Install new label. On FXD models, reuse original rectangular ignition switch label.
- See Figure 4. Switch must be spliced into existing wiring harness approximately 3 in. from original switch body using three small butt splice connectors (blue). Refer to Installing Wire Splicing section at end of this instruction sheet.

WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion resulting in death or serious injury.

WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could result in shifting during vehicle operation, loss of control of vehicle, death or serious injury.

- See Figure 3. Connect battery cables, positive cable first, and test switch operation. Install seat.

Installation– 1994 and Later XL and FXR Models; 1995 and Later FXD Models

- Remove seat. Save all seat hardware for later reinstallation. Disconnect battery, negative cable first.
- On FXR models, remove left side cover. Remove ignition switch nut and cable strap, and remove existing switch and label from switch bracket. For XL and FXD model vehicles, see appropriate Service Manual for switch removal procedures.

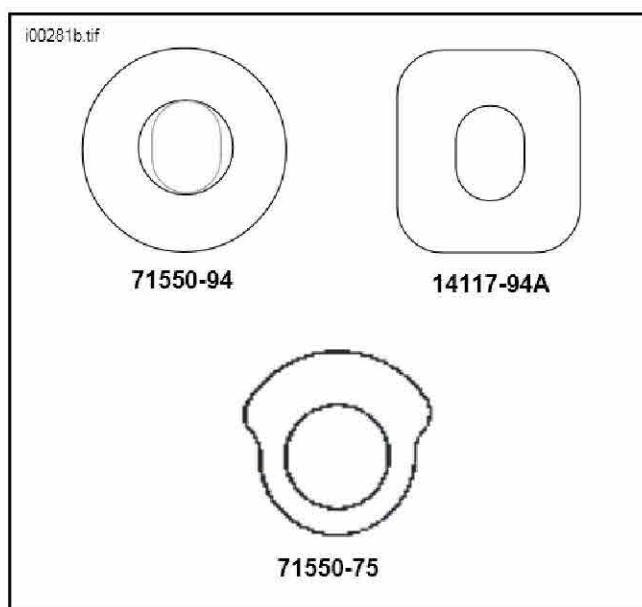


Figure 3A. Ignition Switch Labels

5. See **WARNING** on Page 4. Use heat shrink tubing around all three butt splice connectors (one bundle) for cosmetic purposes. Use cable strap as required to secure switch wires.
6. The word "TOP" is marked on the top of the switch body to allow for proper positioning of switch. Install switch onto mounting bracket. **On XL and FXD models**, see appropriate Service Manual for switch to bracket installation.
7. Remove and save key code tag (on key ring with two keys). Key code is not marked on keys.
8. **On FXR models**, install left side cover.

WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion resulting in death or serious injury.

WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could result in shifting during vehicle operation, loss of control of vehicle, death or serious injury.

9. Reconnect battery, positive cable first, and install seat, if applicable. See Figure 3. Test operation of vehicle.

Installation— 1975-1993 XL, 1982-1993 FXR (except 1986-1992 FXRT/FXRD with Radio), and 1973-1985 FX (except FXST and FXWG)

1. Remove seat. Save all seat hardware for later reinstallation. Disconnect battery, negative cable first. **On FXR models**, remove left side cover. Remove ignition switch nut and remove ignition switch from bracket. **On XL models**, see appropriate Service Manual for removal procedures.

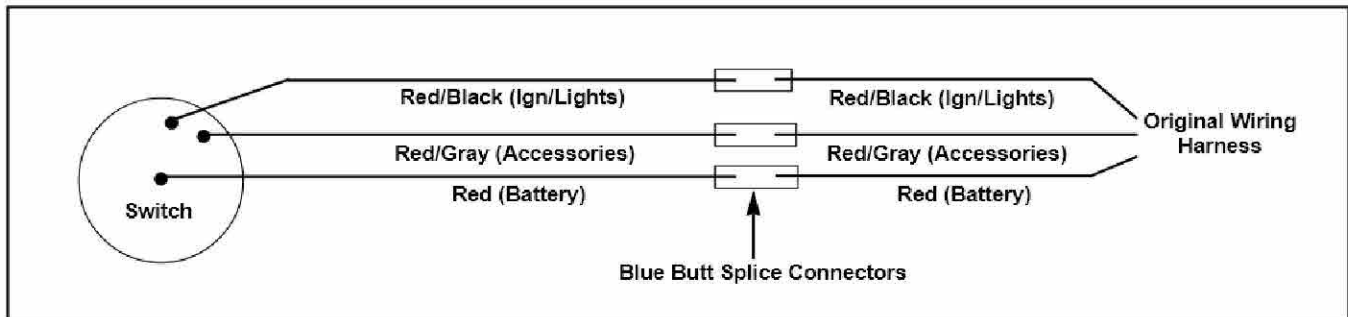


Figure 4. 1994 and Later XL and FXR Models; 1995 and Later FXD Models

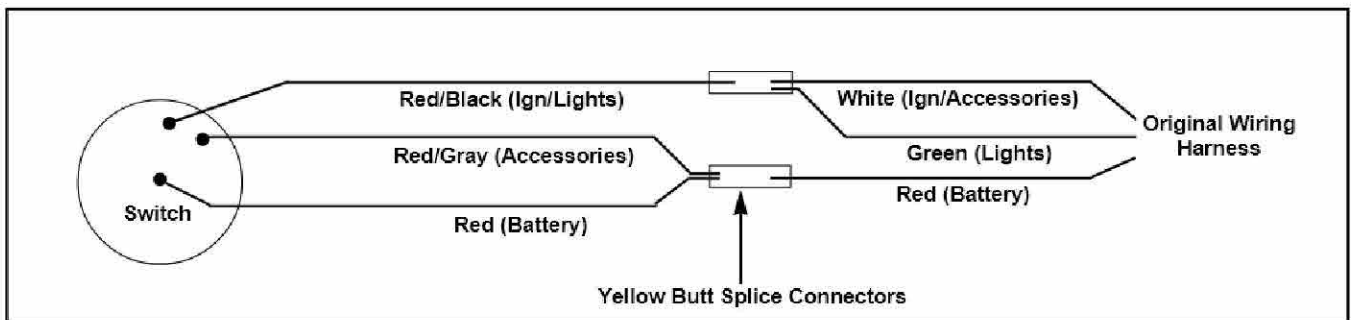


Figure 5. 1975-1993 XL, 1982-1993 FXR (except 1986-92 FXRT/FXRD with Radio) and 1973-1985 FX (except FXST and FXWG)

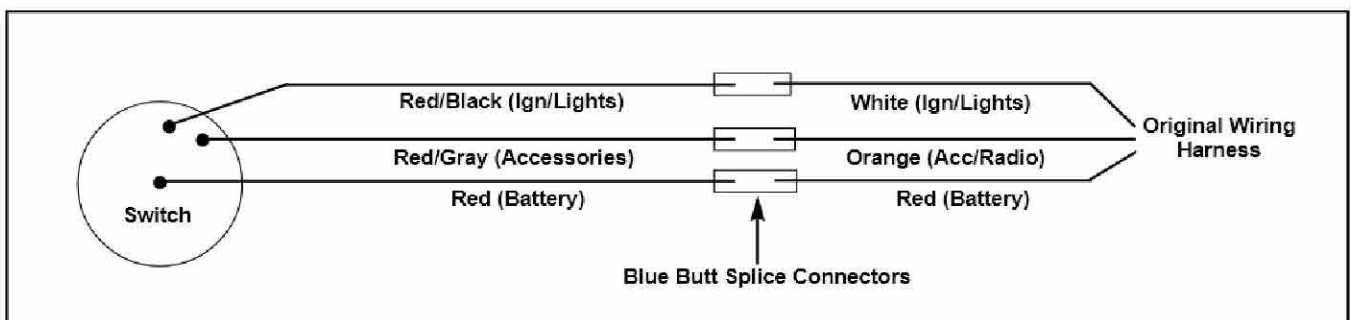


Figure 6. 1986-1992 FXRT/FXRD Models with Radio

2. Remove original ignition switch label.
3. See Figure 3A. Install new ignition switch label, Part No. 71550-75, noting that label should be in a position that is rotated 30° clockwise from position of original switch label. This is required since the new switch key positions are rotated 30° clockwise from the original flat key switch key positions.
4. See Figure 5. Switch must be spliced into existing harness using two large butt splice connectors (yellow). Cut wires approximately 3 in. back from switch. Refer to Installing Wire Splice section at the end of this instruction sheet.
5. See **WARNING** on Page 4. Use heat shrink tubing around both butt splice connectors (one bundle) for cosmetic purposes. Use cable strap as required to secure switch wires.
6. The word "TOP" is marked on the top of the switch body to allow for proper positioning of switch. Install switch onto mounting bracket. **On XL models**, see appropriate Service Manual for switch installation procedures.
7. **Remove and save key code tag (on key ring with two keys). Key code is not marked on keys.**
8. **On FXR models**, install left side cover.
9. Connect battery cables, positive cable first, and test switch operation. Install seat. See Figure 3. Check ignition switch for proper operation.

⚠ WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion resulting in death or serious injury.

⚠ WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could result in shifting during vehicle operation, loss of control of vehicle, death or serious injury.

Installation– 1986-1992 FXRT/FXRD Models with Radio

1. Remove seat. Disconnect battery cables, negative cable first. Remove left side cover. Remove ignition switch nut and remove ignition switch from bracket. Remove original switch label from bracket.
2. See Figure 3A. Trim off "flats" on new round ignition switch label, Part No. 71550-94, to make center hole into a perfect circle. This will allow you to rotate the label so that the new switch key positions will properly match up with the label indications. This is required since the new switch key positions are rotated 30° clockwise from the original flat key switch key positions. Install new label.
3. See Figure 6. Switch must be spliced into existing wiring harness, approximately 3 in. back from original switch body using 3 small butt splice connectors (blue). Refer to Installing Wire Splicing section and related **WARNING** at the end of this instruction sheet.

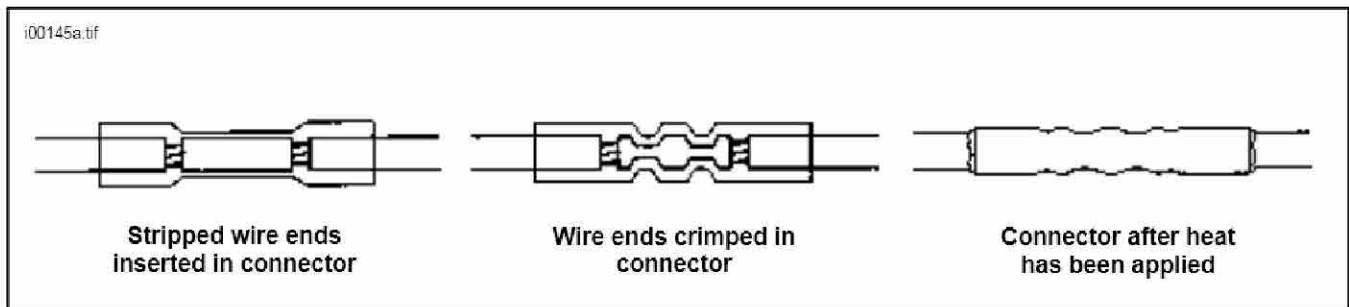


Figure 7. Installing Sealed Butt Connectors

4. See **WARNING** on Page 4. Use heat shrink tubing around all three butt splice connectors (one bundle) for cosmetic purposes. Use cable strap as required to secure switch wires.
5. The word "TOP" is marked on the top of the switch body to allow for proper positioning of switch. Install switch onto mounting bracket.
6. **Remove and save key code tag (on key ring with two keys). Key code is not marked on keys.**
7. Install left side cover.
8. See Figure 3. Connect battery cables, positive cable first, and test switch operation. Install seat.

Installing Wire Splice

1. See Appropriate Wiring Diagram, Figures 4, 5, or 6. Cut wire approximately 3 in. from old switch and approximately 3 in. from new switch.
2. See Figure 7. Strip 3/8 in. of insulation off both wires to be spliced. Insert the wires from new ignition switch and wires from original wiring harness into opposite ends of the appropriate butt splice connector.
3. Match the color of the butt connector with the color of the crimp cavity of the crimping tool. Crimp wires into the connector using HD-38125-8 crimping tool.

WARNING

- Use extreme caution when operating the Ultra Torch UT100 or any other radiant heating device. Read the manufacturer's instructions carefully before using the tool.
 - Always keep hands away from tool tip area and heat shrink attachment.
 - Avoid directing heat toward any fuel system component. Extreme heat can cause fuel ignition/explosion.
 - Avoid directing heat toward any electrical system component other than the connectors on which heat shrink work is being performed.
 - Be sure to turn the "ON/OFF" switch to the "OFF" position after use.
 - Improper tool handling could result in death or serious injury.
4. Using the UltraTorch UT-100 (HD-39969), Robinair Heat Gun (HD-25070) with Heatshrink Attachment (HD-41183) or other suitable radiant heating device, heat the crimped splice to encapsulate the butt splice connection. Apply heat from the center of the crimp out to each end until the meltable sealant exudes out of both ends of the connector (see Figure 1).