



# INSTRUCTIONS

-J04155

REV. 2006-08-25

## BLACK HAND CONTROLS FOR DYNA AND SOFTAIL MODELS

### GENERAL

#### Kit Number

70239-07 (BLACK)

#### Models

This kit is designed for installation on 96 and later Sportster®, Dyna™, Softail®, and Road King® models except Road King Classic or 2007 and later FLSTF.

Does not fit vehicles equipped with cruise control.

2006 and later FXDWG and FXDB require separate purchase of Directional relocation kit: 68564-06.

#### Additional Parts Required

#### Tools:

- Deutsch terminal crimp tool part HD-42879
- Molex terminal crimp tool part HD-48119
- Molex terminal removal tool part HD-48114

### WARNING

The rider's safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)

#### NOTE

This instruction sheet references Service Manual information. A Service Manual for your model motorcycle is required for this installation and is available from a Harley-Davidson Dealer.

#### Kit Contents

See Figure 2 and Table 3.

### INSTALLATION

1. Disconnect battery, remove seat and fuel tank following instructions in applicable Service Manual.
2. Review the Right and Left Handlebar Switch section of the applicable Softail or Dyna Service Manual before attempting to install this kit.

#### NOTE

Both **Right and Left** hand control assemblies will come with terminated ends. The terminal ends provided will not be used, instead the harness is to be cut to length, and new terminals will be installed.

### WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect negative (-) battery cable before proceeding. (00048a)

### WARNING

Disconnect negative (-) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00049a)

#### Install New Right Handlebar Control with Harness

### CAUTION

Do not remove or install the master cylinder assembly without first positioning a 5/32-inch (4 mm) thick insert between the brake lever and lever bracket. Removing or installing the master cylinder assembly without the insert in place may result in damage to the rubber boot and plunger on the front stoplight switch. (00324a)

1. Remove the right side hand control from vehicle.

Refer to Right Hand Control section of applicable Service Manual for detailed instructions.

2. Trace the right handlebar wiring harness to the 6-pin connector and disconnect connector halves.

#### NOTE

Note the existing harness routing and cable ties securing the harness to handlebars.

3. See Figure 2. Select the new Right Handlebar Control and Harness Assembly (2) from the kits.
4. The new harness has Molex pin connectors in place. The harness may need to be modified for your motorcycle. After removing the existing Harness, measure it to verify its length, and compare it with the length in Table 2.

#### NOTE

If alternate handlebars and/or risers are used, it will be necessary to fully route the harness to verify the new custom length. Cut harness to appropriate length **only after** accounting for slack in full range of steering motion.

5. See Table 1 and Figure 1 to determine appropriate connector and terminals based on vehicle model and year.
6. See Service Manual for crimping and assembly instructions of terminals and electrical connectors.  
1996 through 2006 vehicles use Deutsch connectors.  
2007 and later vehicles use Molex connectors.  
Right side connectors will be black in color.

**NOTE**

For motorcycles with internally wired handlebars: route the harness through the handlebars before adding Molex or

Deutsch connector.

- See Table 1 to determine pin-out cavity assignments based on wire colors of hand control harness.

**Table 1. Pin-out Assignments**

RH or LH	Connector Type	Cavity Number	Wire Color
RH	Deutsch 6-Pin (Black) 1996 through 2006	1	O/W
		2	R/Y
		3	GY
		4	W/BK
		5	W/BN
		6	BK/R
LH	Deutsch 6-Pin (Gray) 1996 through 2006	1	O/W
		2	Y
		3	BE
		4	W
		5	W/V
		6	Y/BK
RH	Molex 6-Pin (Black) 2007 and Later	1	O/W
		2	R/Y
		3	GY
		4	W/BK
		5	W/BN
		6	BK/R
LH	Molex 8-Pin (Gray) 2007 and Later	1	O/W
		2	Y
		3	BE
		4	W
		5	W/Y
		6	Y/BK
		7	*BK/R
		8	*BK
* See Page 4, Wires Not Used			

**Table 2. Harness Wire Length**

Family	Model	Year	Wire Length Left inches (cm)	Wire Length Right inches (cm)
DYNA	All DYNA	1996 through 2005	35.75 (90.8)	42.5 (108.0)
	FXD, FXDL, FXDC, FXD35	2006	29.5 (74.9)	30.0 (76.2)
	FXDWG, FXDB	2006 through 2007	39.75 (101.0)	39.75 (101.0)
	FXD, FXDL, FXDC, FXD35	2007	30.0 (76.2)	30.5 (77.5)
TOURING	FLHR	1996 through 2006	21.25 (54.0)	21.25 (54.0)
	FLHRS	2004 through 2006	23.0 (58.4)	23.0 (58.4)
	FLHR	2007	21.75 (55.2)	21.75 (55.2)
	FLHRS	2007	24.75 (62.9)	24.75 (62.9)

**Table 2. Harness Wire Length**

Family	Model	Year	Wire Length Left inches (cm)	Wire Length Right inches (cm)
SOFTAIL	ALL EXCEPT FXSTB, FXSTD, or 2004 THROUGH 2006 FXSTS	1996 through 2006	37.25 (94.6)	34.25 (87.0)
	FXSTB, FXSTD	1996 through 2003	33.75 (85.7)	32.25 (81.9)
	FXSTB, FXSTD	2004 through 2006	28.25 (71.8)	32.25 (81.9)
	FXSTS	2004 through 2006	28.75 (73.0)	28.25 (71.8)
	ALL EXCEPT FXSTB or FXSTD	2007	34.25 (87.0)	34.75 (88.3)
	FXSTB	2007	28.75 (73.0)	32.75 (83.2)
	FXSTD	2007	34.25 (87.0)	32.75 (83.2)
XL	ALL EXCEPT CUSTOM	1996 through 2003	28.25 (71.8)	28.25 (71.8)
	XL883C, 1200C	1996 through 2003	21.25 (54.0)	21.25 (54.0)
	XL883C, 1200C, XL883L, 1200L, XL883R, 1200R	2004 through 2007	32.25 (81.9)	32.25 (81.9)
	XL883	2004 through 2007	28.75 (73.0)	28.75 (73.0)



**Figure 1. Hand Control Connectors**

8. Install new connector in same location as stock connector was removed in Step 1. the harness conduit to lower side of handlebar by inserting barbed ends of retainers into holes in lower side of handlebar.
9. Adjust the harness so it runs under the lower handlebar and then using two harness retainers from the kit, secure

## Install New Left Handlebar Control with Harness

1. Remove the left side hand control from vehicle.

Refer to Left Hand Control section of applicable Service Manual for detailed instructions.

2. Trace the left handlebar wiring harness to the 6-pin or 8-pin connector and disconnect connector halves.

### NOTE

*Note the existing harness routing and cable ties securing the harness to handlebars.*

3. See Figure 2. Select the new Left Handlebar Control (1) and Harness Assembly from the kits.
4. Compare the length of the hand control harness that was removed to the length of the control harness provided with the kit, and cut new harness to same length.

### NOTE

*If alternate handlebars and/or risers are used, it will be necessary to full route the harness to verify the new custom length. Cut harness to appropriate length **only** after accounting for slack in full range of steering motion.*

5. See Table 1 to determine appropriate connector and terminals based on vehicle model and year.
6. See Service Manual for crimping and assembly instructions of terminals and electrical connectors.  
1996 through 2006 vehicles use Deutsch connectors.  
2007 and later vehicles use Molex connectors.  
Left side connectors will be gray in color.
7. See Table 1 to determine pin-out cavity assignments based on wire colors.

### NOTE

**\*Wires Not Used:** 1996 through 2006 Left hand controls will only use 6 of the 8 wires contained in the hand control harness. Pull back the vinyl conduit and cut the 2 unused wires at the 6-way connector (BLACK and BLACK WITH RED STRIPE). These wires will not be used.

8. Install new connector in same location as stock connector was removed in Step 1.
9. See Table 3. Adjust the harness so it runs under the lower handlebar and then using two harness retainers (3) from

the kit, secure the harness conduit to lower side of handlebar by inserting barbed ends of retainers into holes in lower side of handlebar.

## Connecting and Securing the Harness

1. Connect the black connector of the right hand control to the mating gray connector of the main vehicle Harness.
2. Connect the gray connector of the left hand control to the mating gray connector of the main vehicle Harness.
3. Secure the hand control harness to the vehicle harness using cable straps from kit.

## RETURN THE VEHICLE TO SERVICE

1. Install the fuel tank.
2. Reconnect the battery, positive (+) cable first.

### ⚠ WARNING

**Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)**

### ⚠ WARNING

**Be sure headlamp, tail and stop lamp and turn signals are operating properly before riding. Poor visibility of rider to other motorists can result in death or serious injury. (00478b)**

3. Install seat.

### ⚠ WARNING

**After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)**

- Verify that the steering is not limited in any way by harness routing.
- Verify full range of motion for turning by checking steering in full right and left lock position.
- Verify Operation of all switches before operating vehicle.

# SERVICE PARTS

is03406

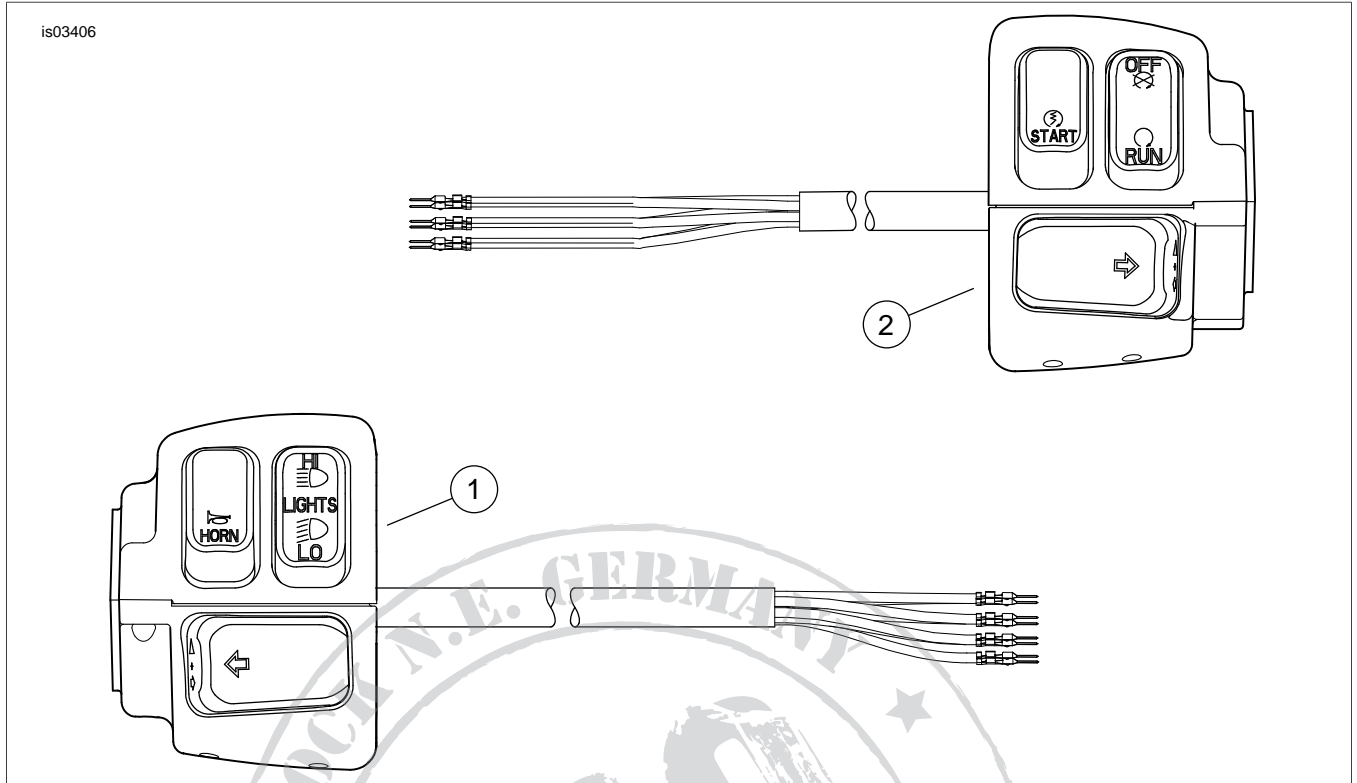


Figure 2. Service Parts

Table 3. Service Parts Table

Item	Handlebar Control, Black, Kit 70239-07 (Quantity)	Part Number
1	Handlebar Control, Left Hand, Black	70539-07
2	Handlebar Control, Right Hand, Black	70560-07
3	Retainer, Wiring (4) (Not Shown)	70345-84
4	Housing, 6-way Socket, gray (Not Shown)	72136-94GY
5	Housing, 6-way Socket, black (Not Shown)	72116-94BK
6	Terminal, Socket, #16-20AWG (12) (Not Shown)	72191-94
7	Lock, Secondary, 6-way Socket (Not Shown)	72156-94
8	Seal, Front (2) (Not Shown)	72176-94
9	Housing, 8-way Pin, gray (Not Shown)	72447-07GY
10	Housing, 6-way Pin, black (Not Shown)	72188-07BK
11	Terminal, Pin, #16-20AWG (14) (Not Shown)	72169-07
12	Screw, #10-24 x 1/2 Hex Socket, Button Head (4) (Not Shown)	3658