



INSTRUCTIONS

-J03820

REV. 2006-09-12

LIGHTED MIRRORS

GENERAL

Kit Number

92059-07

Models

This kit fits all 1997 and later models equipped with stock mirrors.

NOTE

The mirrors in this kit are not intended to replace the stock turn signals. Mirror turn signals will not function properly without the stock turn signals installed.

Additional Parts Required

⚠ 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.

CAUTION

It is possible to overload your motorcycle's charging system by adding too many electrical accessories. If your combined electrical accessories operating at any one time consume more electrical current than your vehicle's charging system can produce, the electrical consumption can discharge the battery and cause vehicle electrical system damage. See a Harley-Davidson dealer for advice about the amount of current consumed by additional electrical accessories, or for necessary wiring changes. (00211b)

Kit Contents

See Figure 23 and Table 4.

NOTES

Place a clean shop towel or a protective blanket over the equipment to avoid scratching painted surfaces when installing this kit.

This kit requires up to 500 mA of additional current from the electrical system.

⚠ WARNING

When installing any electrical accessory, be certain not to exceed the maximum amperage rating of the fuse or circuit breaker protecting the affected circuit being modified. Exceeding the maximum amperage can lead to electrical failures, which could result in death or serious injury. (00310a)

REMOVAL

Prepare for Service

Touring Models: Remove left side saddlebag, left side cover, and maxi-fuse. Refer to SADDLEBAG and MAXI-FUSE in Service Manual.

Softail and Dyna Models:

⚠ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect battery cables (negative (-) cable first) before proceeding. (00307a)

⚠ 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)

1. Remove seat according to the instructions in the Service Manual.
2. Disconnect battery cables, negative (-) cable first.
3. Remove fuel tank according to the instructions in the Service Manual.

Sportster Models: Remove left side cover and maxi-fuse. Refer to MAXI-FUSE in Service Manual.

V-Rod Models: Remove right side cover and maxi-fuse. Refer to MAXI-FUSE in Service Manual.

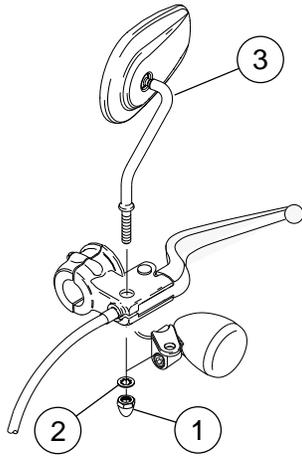
Remove Existing Mirrors

Touring and Softail (Except FXSTD, FLSTF) Models

Left side: See Figure 1. Remove acorn nut (1), star washer (2), and existing mirror (3) from clutch hand control assembly. Discard star washer and mirror but save acorn nut.

Right side: See Figure 2. Remove acorn nut (1), star washer (2), and existing mirror (3) from front brake hand control assembly. Discard star washer and mirror but save acorn nut.

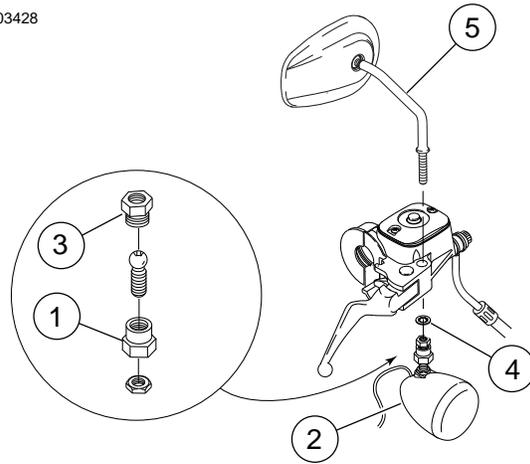
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1. Acorn nut
2. Star washer
3. Mirror, left

Figure 1. Remove L.H. Mirror (Except Sportster)

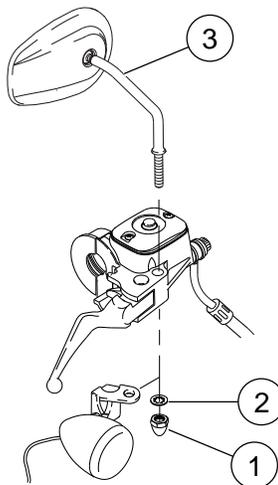
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1. Ball stud clamp
2. Directional lamp assembly
3. Retainer
4. Star washer
5. Mirror, right

Figure 3. Remove R.H. Mirror (Dyna, FXSTD, FLSTF, VRSC)

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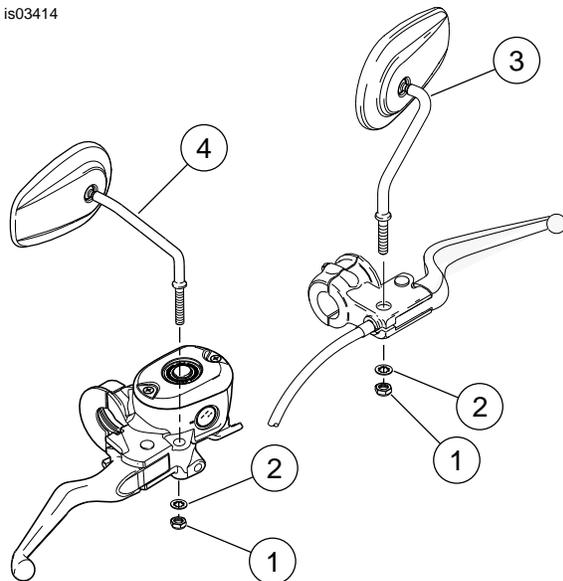
1. Acorn nut
2. Star washer
3. Mirror, right

Figure 2. Remove R.H. Mirror (Touring, Softail - Except FXSTD, FLSTF)

Dyna, FXSTD, FLSTF, and VRSC Models

1. *Left side:* See Figure 1. Remove acorn nut (1), star washer (2), and existing mirror (3) from clutch hand control assembly. Discard star washer and mirror but save acorn nut.
2. *Right side:* See Figure 3. Loosen ball stud clamp (1) to remove directional lamp assembly (2). Remove retainer (3), star washer (4), and existing mirror (5) from front brake hand control assembly. Discard star washer and mirror but save remaining parts.

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1. Locknut (2)
2. Washer (2)
3. Mirror, left
4. Mirror, right

Figure 4. Remove Mirrors (Sportster)

INSTALLATION

Install Lighted Mirrors

Touring and Softail (Except FXSTD, FLSTF, FXSTS, FLSTS) Models

1. *Left side:* See Figure 5. Install mirror stem (1) through clutch hand control assembly.

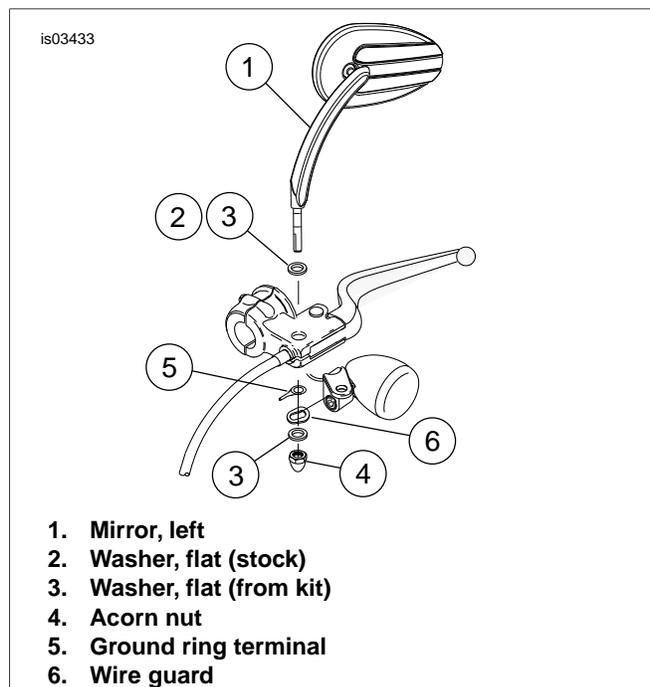


Figure 5. Install L.H. Lighted Mirror (Except Sportster, FXSTS, FLSTS)

2. Install stock washer (2) or flat washer from kit (3) on top of hand control assembly (if needed) to stabilize mirror stem.
3. Slide mirror power lead wire (gray) through ground wire ring terminal (5) (flat side up), then install ring terminal on mirror stem.
4. Slide mirror power lead wire (gray) through wire guard (6), then install wire guard on mirror stem.
5. Install flat washer (3) from kit on mirror stem.

NOTE

Be sure wire exiting mirror stem is positioned in wire guard so it does not get crushed by hardware.

6. Install acorn nut (4) on mirror stem (1). Tighten to 8-12 ft-lbs (10.8-16.3 Nm). Be careful not to over tighten.
7. *Right side:* See Figure 6. Repeat steps to install right side lighted mirror (front brake hand control assembly).

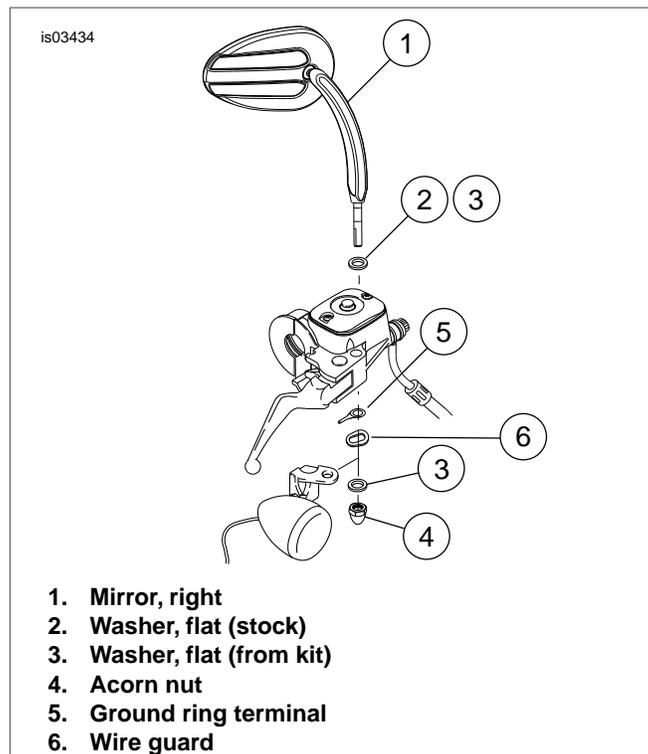


Figure 6. Install R.H. Lighted Mirror (Except Sportster, Dyna, FXSTD, FLSTF, FXSTS, FLSTS, VRSC)

Dyna, FXSTD, FLSTF, and VRSC Models

1. *Left side:* See Figure 5. Complete steps from previous subtopic to install left side lighted mirror (clutch hand control assembly).

Right side: See Figure 7. Install mirror stem (1) through front brake hand control assembly.

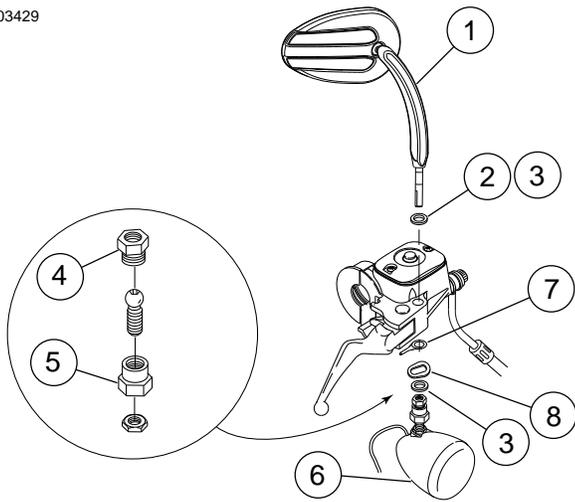
2. Install stock washer (2) on top of hand control assembly or use flat washer (3) from kit (if needed) to stabilize mirror stem.
3. Slide mirror power lead wire (gray) through ground wire ring terminal (7) (flat side up), then install ring terminal on mirror stem.
4. Slide mirror power lead wire (gray) through wire guard (8), then install wire guard on mirror stem.
5. Install flat washer (3) from kit on mirror stem (1).

NOTE

Be sure wire exiting mirror stem is positioned in wire guard so it does not get crushed by hardware.

6. Install retainer (4) on mirror stem (1). Tighten ball stud clamp (5) to install directional lamp assembly (6).

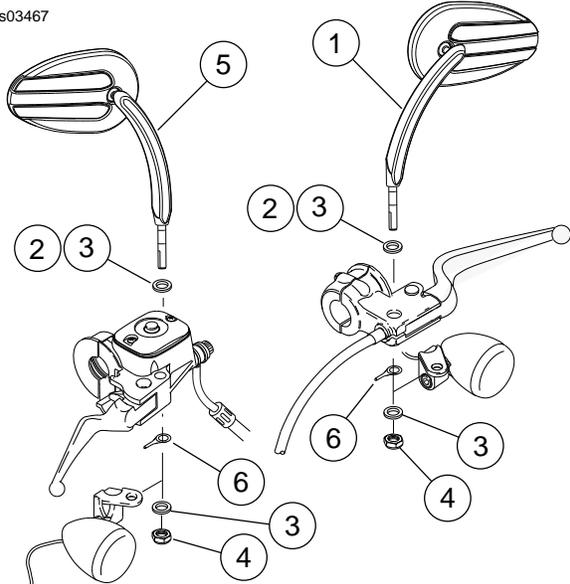
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1. Mirror, right
2. Washer, flat (stock)
3. Washer, flat (from kit)
4. Retainer
5. Ball stud clamp
6. Directional lamp assembly
7. Ground ring terminal
8. Wire guard

Figure 7. Install R.H. Lighted Mirror (Dyna, FXSTD, FLSTF, VRSC)

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1. Mirror, left
2. Washer (2) (stock)
3. Washer, flat (2) (from kit)
4. Locknut (2)
5. Mirror, right
6. Ground ring terminal

Figure 8. Install Lighted Mirrors (FXSTS, FLSTS)

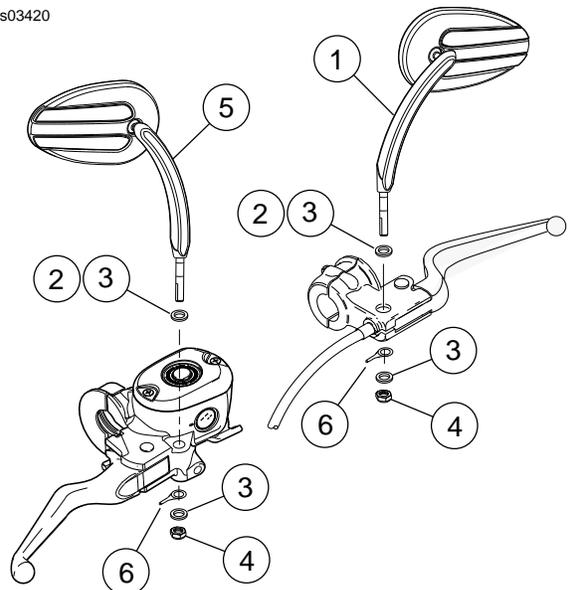
FXSTS and FLSTS Models

1. *Left side:* See Figure 8. Install mirror stem (1) through clutch hand control assembly.
2. Install stock washer (2) on top of hand control assembly or use flat washer (3) from kit (if needed) to stabilize mirror stem.
3. Slide mirror power lead wire (gray) through ground wire ring terminal (6) (flat side up), then install ring terminal on mirror stem.
4. See Figure 8. Slide mirror power lead wire through flat washer (3) from kit, then install washer on mirror stem.
5. Slide mirror power through locknut (4) from kit, then install locknut on mirror stem (1). Tighten to 8-12 ft-lbs (10.8-16.3 Nm). Be careful not to over tighten.
6. *Right side:* See Figure 8 Repeat steps to install right side lighted mirror (front brake hand control assembly).

Sportster Models

1. *Left side:* See Figure 9. Install mirror stem (1) through clutch hand control assembly.

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1. Mirror, left
2. Washer, flat (2) (stock)
3. Washer, flat (2) (from kit)
4. Locknut (2)
5. Mirror, right
6. Ground ring terminal

Figure 9. Install Lighted Mirrors (Sportster)

2. Install stock washer (2) on top of hand control assembly or use flat washer (3) from kit (if needed) to stabilize mirror stem.
3. Slide mirror power lead wire (gray) through ground wire ring terminal (6) (flat side up), then install ring terminal on mirror stem.
4. Slide mirror power lead wire through flat washer (3) from kit, then install washer on mirror stem.
5. Slide mirror power lead through locknut (4) from kit, then install locknut on mirror stem (1). Tighten to 8-12 ft-lbs (10.8-16.3 Nm). Be careful not to over tighten.
6. *Right side:* See Figure 9. Repeat steps to install right side lighted mirror (front brake hand control assembly).

Table 1. Turn Signal Connectors

Model	Multilock Connector
FLHR/C/S 2005-earlier FLHT/C/U 2002-earlier FLTR 2003-later FLTR 2006-later FLHX, FLHT/C/U	6-place 6-place 6-place 3-place 4-place
Softail	6-place
Dyna (2005-earlier) Dyna (2006-later)	6-place 3-place
Sportster, VRSC, and Older Models	6-place

Install Y-Harness FLHR/C/S Models

1. Remove headlamp assembly. Refer to HEADLAMP (FLHR/C/S) in Service Manual.
2. See Figure 10 and Table 1. Locate and separate front turn signal connector inside nacelle. Note wire color and cavity locations.

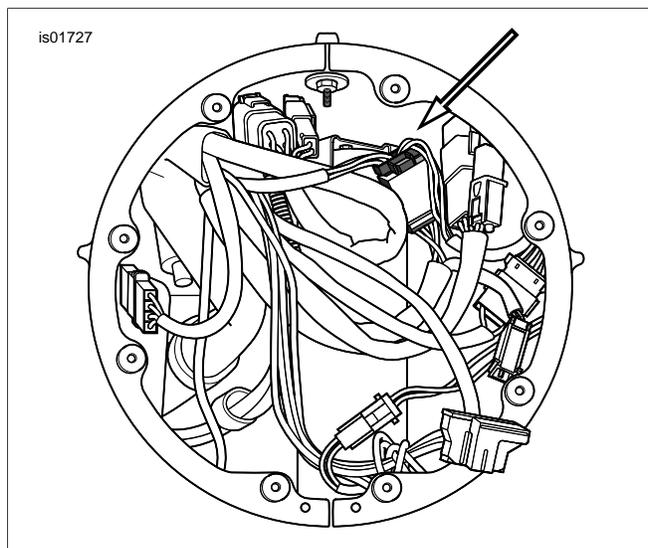
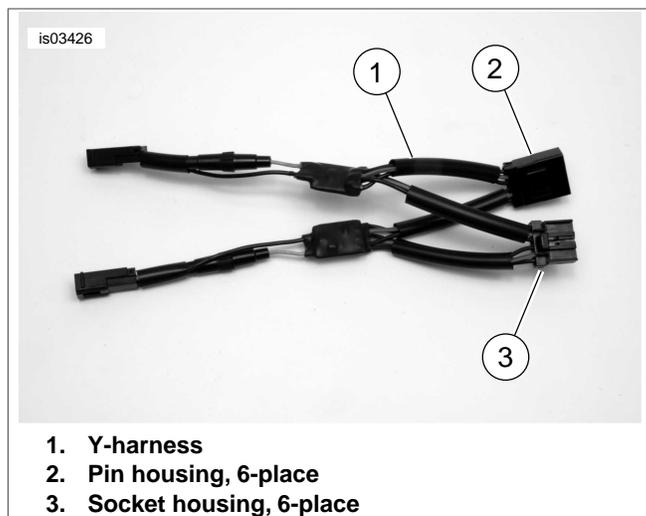


Figure 10. Front Turn Signal Connector (FLHR/C/S)

Table 2. Wire Color and Cavity Locations

Left and Right Turn Signals			
Right Turn Signal			
Cavity	1	2	3
6-Place Connector	Blk	Brn	Blue
Y-Harness	Blk	Red	Blue
Left Turn Signal			
Cavity	4	5	6
6-Place Connector	Blue	Vio	Blk
Y-Harness	Blue	Red	Blk

3. See Figure 23 and Table 2. Locate 6-place multilock connectors (12, 13) and two Y-harness assemblies (5) from kit. Align both Y-harness assemblies together, matching pin terminated wire ends and socket terminated wire ends.
4. Coat terminals on Y-harness with dielectric grease (included in kit).
5. See Figure 11. Install connectors on ends of combined Y-harness assemblies. Note wire color and cavity locations. Refer to MULTILOCK ELECTRICAL CONNECTORS in Service Manual.



1. Y-harness
2. Pin housing, 6-place
3. Socket housing, 6-place

Figure 11. Y-Harness Assembly (6-Place Multilock)

6. Insert combined Y-harness assembly between the two separated front turn signal connectors on vehicle.

Install Y-Harness - Other Touring Models

6-Place Multilock Connectors:

1. Remove outer fairing. Refer to UPPER FAIRING/WINDSHIELD in Service Manual.
2. See Figure 12 and Table 1. Locate and separate front turn signal connector inside inner fairing - left fairing support brace. Note wire color and cavity locations.

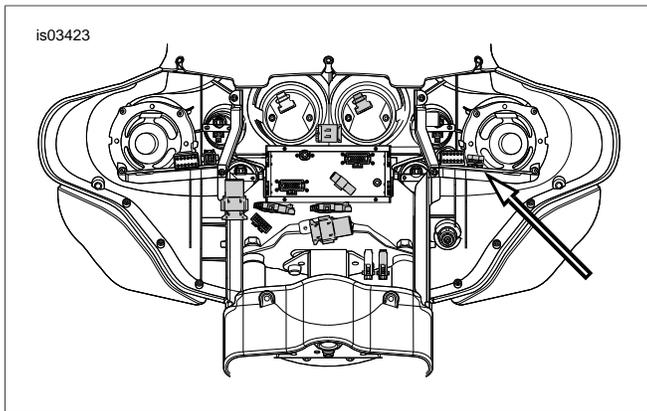
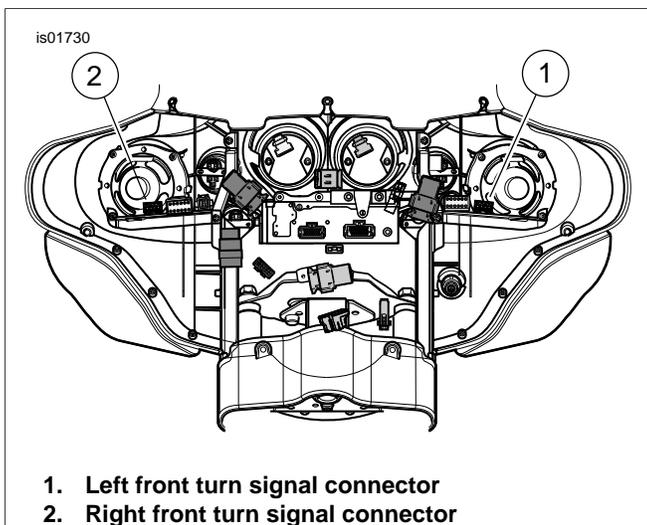


Figure 12. Front Turn Signal Connector (2005-Earlier FLHT/C/U)

3. See Figure 23 and Table 2. Locate 6-place multilock connectors (12, 13) and two Y-harness assemblies (5) from kit. Align both Y-harness assemblies together, matching pin terminated wire ends and socket terminated wire ends.
4. Coat terminals on Y-harness with dielectric grease (included in kit).
5. See Figure 11. Install connectors on ends of combined Y-harness assemblies. Note wire color and cavity locations. Refer to MULTILOCK ELECTRICAL CONNECTORS in Service Manual.
6. Insert combined Y-harness assembly between the two separated front turn signal connectors.

3 and 4-Place Multilock Connectors:

1. Remove outer fairing. Refer to UPPER FAIRING/WINDSHIELD in Service Manual.
2. See Figure 13 and Table 3. Locate and separate front turn signal connectors inside inner fairing - left and right fairing support brace. Note wire color and cavity locations.



1. Left front turn signal connector
2. Right front turn signal connector

Figure 13. Front Turn Signal Connectors (FLTR Shown)

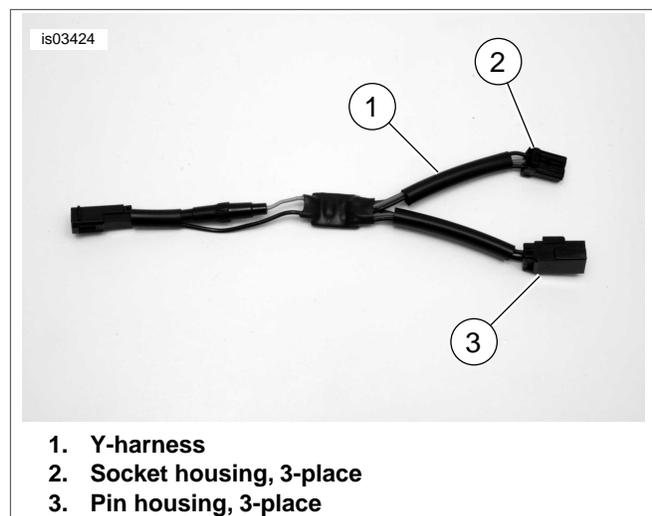
3. See Figure 23. Locate appropriate connectors (3 or 4-place) and two Y-harness assemblies (5) from kit.
4. Coat terminals on Y-harness with dielectric grease (included in kit).

5. See Figure 14 and Figure 15. Install appropriate connectors on ends of Y-harness assemblies. See Table 3. Note wire color and cavity locations. Refer to MULTILOCK ELECTRICAL CONNECTORS in Service Manual.

Table 3. Turn Signal Connections (3 and 4-Place)

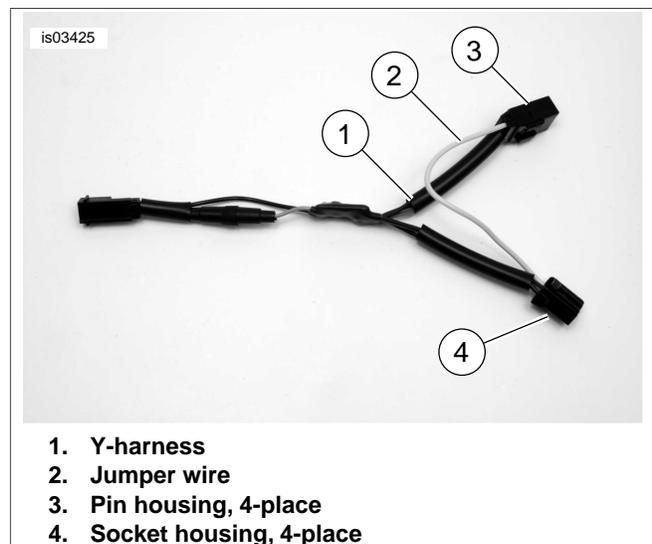
Left Turn Signal	Right Turn Signal
Violet to Red	Brown to Red
Blue to Blue	Blue to Blue
Black to Black	Black to Black
Gray/Black to Gray/Black 4-Place Only	Gray/Black to Gray/Black 4-Place Only

6. See Figure 15. For models with 4-place multilock connectors, install ends of jumper wire assembly (2) (Figure 23, Item 14) into open cavities in Y-harness connectors.



1. Y-harness
2. Socket housing, 3-place
3. Pin housing, 3-place

Figure 14. Y-Harness Assembly (3-Place Multilock)



1. Y-harness
2. Jumper wire
3. Pin housing, 4-place
4. Socket housing, 4-place

Figure 15. Y-Harness Assembly (4-Place Multilock)

7. Insert Y-harness assemblies with connectors between the two separated front turn signal connectors on vehicle.

Install Y-Harness - Softail Models

1. See Figure 16 and Table 1. Locate and separate front turn signal connector under fuel tank on right side. Note wire color and cavity locations.

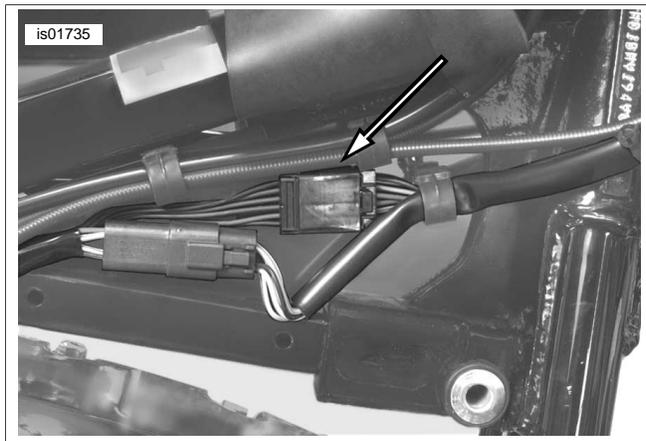


Figure 16. Softail Front Turn Signal Connector

2. See Figure 23 and Table 2. Locate 6-place multilock connectors (12, 13) and two Y-harness assemblies (5) from kit. Align both Y-harness assemblies together, matching pin terminated wire ends and socket terminated wire ends.
3. Coat terminals on Y-harness with dielectric grease (included in kit).
4. See Figure 11. Install connectors on ends of combined Y-harness assemblies. Note wire color and cavity locations. Refer to MULTILOCK ELECTRICAL CONNECTORS in Service Manual.
5. Insert combined Y-harness assembly between the two separated front turn signal connectors on vehicle.

Install Y-Harness - Dyna Models

2005-Earlier Models:

1. See Figure 17 and Figure 18. Remove plug on right side of top frame tube. At service loop, remove cable strap and push wire harness into top frame tube. Pull front turn signal connector out from hole on right side of tube.
2. Separate front turn signal connectors. Note wire color and cavity locations.
3. See Figure 23 and Table 2. Locate 6-place multilock connectors (12, 13) and two Y-harness assemblies (5) from kit. Align both Y-harness assemblies together, matching pin terminated wire ends and socket terminated wire ends.
4. Coat terminals on Y-harness with dielectric grease (included in kit).
5. See Figure 11. Install connectors on ends of combined Y-harness assemblies. Note wire color and cavity locations. Refer to MULTILOCK ELECTRICAL CONNECTORS in Service Manual.
6. Insert combined Y-harness assembly between the two separated front turn signal connectors on vehicle.

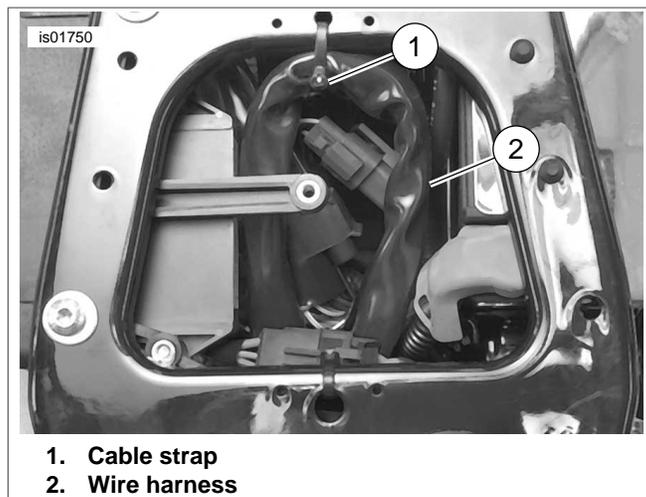


Figure 17. Dyna Service Loop (2005-Earlier)

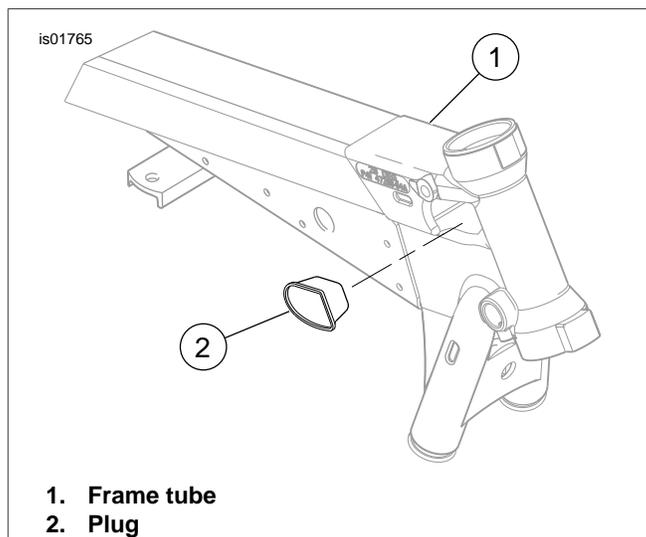


Figure 18. Dyna Top Frame Tube (2005-Earlier)

2006-Later Models:

1. See Figure 19. Remove cover under top frame tube, then pull front turn signal connectors (3-place multilock) out from opening under tube.
2. Separate front turn signal connectors. Note wire color and cavity locations.
3. See Figure 23. Locate 3-place multilock connectors (8, 9) and two Y-harness assemblies (5) from kit.
4. Coat terminals on Y-harness with dielectric grease (included in kit).
5. See Figure 14. Install connectors on ends of Y-harness assemblies. See Table 3. Note wire color and cavity locations. Refer to MULTILOCK ELECTRICAL CONNECTORS in Service Manual.
6. Insert Y-harness assemblies with connectors between the two separated front turn signal connectors on vehicle.

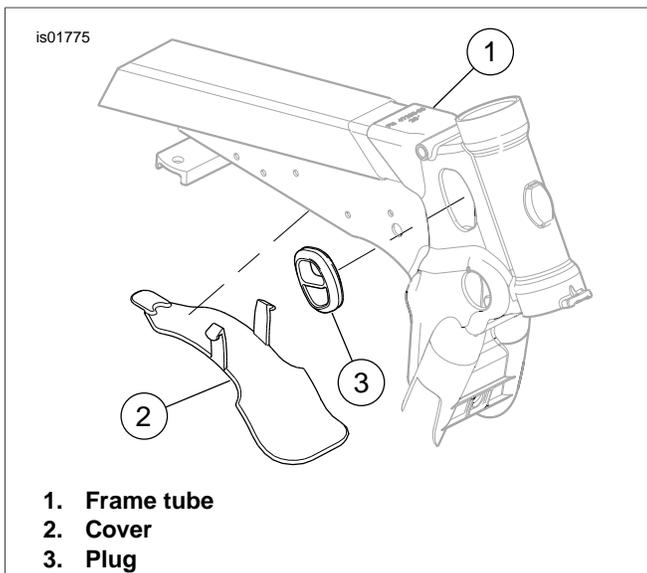


Figure 19. Dyna Top Frame Tube (2006-Later)

Install Y-Harness - Sportster Models

1. See Figure 20. Locate and separate front turn signal connector (6-place multilock) under fuel tank. Note wire color and cavity locations.

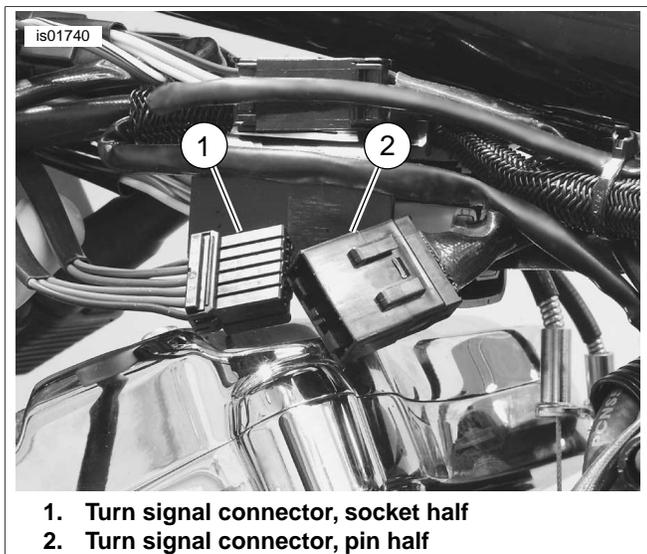


Figure 20. Sportster Front Turn Signal Connector

2. See Figure 23 and Table 2. Locate 6-place multilock connectors (12, 13) and two Y-harness assemblies (5) from kit. Align both Y-harness assemblies together, matching pin terminated wire ends and socket terminated wire ends.
3. Coat terminals on Y-harness with dielectric grease (included in kit).
4. See Figure 11. Install connectors on ends of combined Y-harness assemblies. Note wire color and cavity locations. Refer to **MULTILOCK ELECTRICAL CONNECTORS** in Service Manual.
5. Insert combined Y-harness assembly between the two separated front turn signal connectors on vehicle.

Install Y-Harness - V-Rod Models

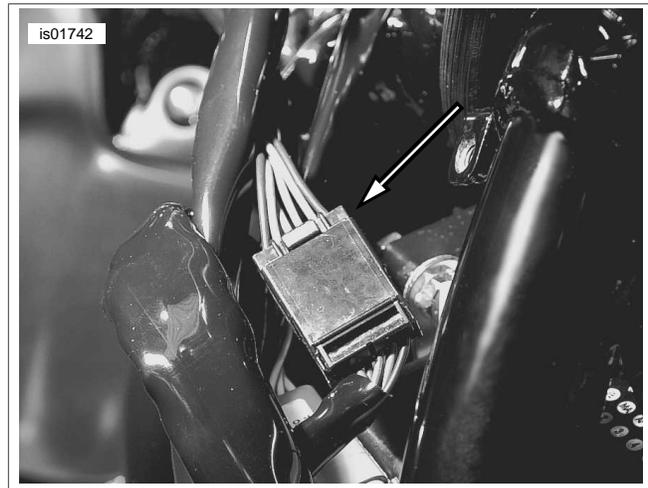


Figure 21. V-Rod Front Turn Signal Connector (2004-Later)

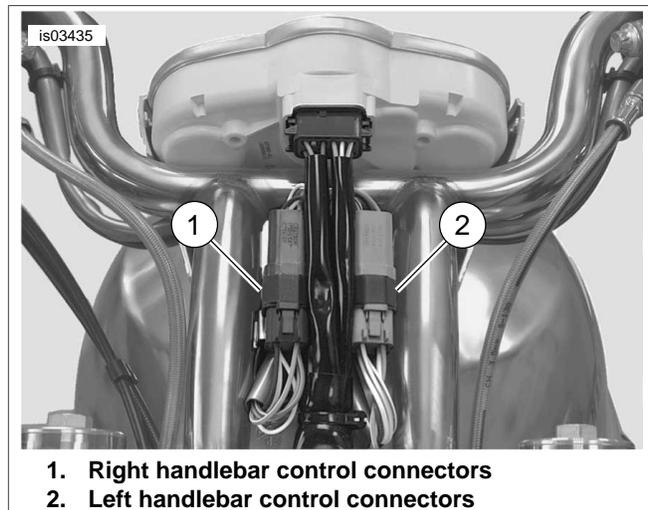


Figure 22. V-Rod Handlebar Control Connectors (2003-Earlier)

1. *VRSCR Models:* See Figure 21. Remove left side cover following the instructions in the Service Manual.
2003-Earlier VRSC Models: See Figure 22. Remove instrument cluster following the instructions in the Service Manual.
2004-Later VRSC Models: Remove left side cover following the instructions in the Service Manual.
2. Locate and separate front turn signal connector (6-place multilock). Note wire color and cavity locations.
3. See Figure 23 and Table 2. Locate 6-place multilock connectors (12, 13) and two Y-harness assemblies (5) from kit. Align both Y-harness assemblies together, matching pin terminated wire ends and socket terminated wire ends.
4. Coat terminals on Y-harness with dielectric grease (included in kit).
5. See Figure 11. Install connectors on ends of combined Y-harness assemblies. Note wire color and cavity locations. Refer to **MULTILOCK ELECTRICAL CONNECTORS** in Service Manual.

6. Insert combined Y-harness assembly between the two separated front turn signal connectors on vehicle.

Connect Mirrors to Y-Harnesses (All Models)

1. Determine path for routing wires from mirror to Y-harnesses from kit plugged in between front turn signal connectors on vehicle. Wires will travel along handlebars towards center of bike.
2. Cut mirror power and ground wire leads to optimal length for reaching Y-harnesses.
3. See Figure 23. Slide conduit (6) up mirror power and ground wire leads.
4. Terminate ends of mirror and ground wires with socket terminals (4) from kit using crimping tool. Refer to MULTI-LOCK ELECTRICAL CONNECTORS in Service Manual.
5. Coat terminals with dielectric grease (included in kit).
6. Install 2-place socket connectors on each pair of terminated mirror wire leads. Refer to MULTILOCK ELECTRICAL CONNECTORS in Service Manual. Note which connectors are for left and right mirrors.
7. Plug 2-place socket connectors from mirror wire leads into appropriate left and right open 2-place pin connectors in Y-harnesses installed on vehicle.
8. Use wire ties from kit (Figure 23, Item 17) to arrange and pack Y-harness wires to minimize environmental exposure.
9. Use wire ties from kit (Figure 23, Item 17) to secure mirror wire conduit to handlebars.

Final Assembly

Touring Models

1. *FLHR/C/S Models:* Install headlamp assembly. Refer to HEADLAMP (FLHR/C/S) in Service Manual.
Other Touring Models: Install outer fairing. Refer to UPPER FAIRING/WINDSHIELD in Service Manual.
2. Install maxi-fuse, left side cover, and left side saddlebag. Refer to MAXI-FUSE and SADDLEBAG in Service Manual.

Softail and Dyna Models

1. Install fuel tank according to the instructions in the Service Manual.

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)

2. Connect battery cables, positive (+) cable first.
3. Install seat according to the instructions in the Service Manual.

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)

Sportster Models

1. Install fuel tank according to the instructions in the Service Manual.
2. Install seat according to the instructions in the Service Manual.

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)

3. Install maxi-fuse and left side cover. Refer to MAXI-FUSE in Service Manual.

V-Rod Models

1. *2003-Earlier:* Install instrument cluster following the instructions in the Service Manual.
2004-Later: Install left side cover following the instructions in the Service Manual.
2. Install maxi-fuse and right side cover. Refer to MAXI-FUSE in Service Manual.

SERVICE PARTS

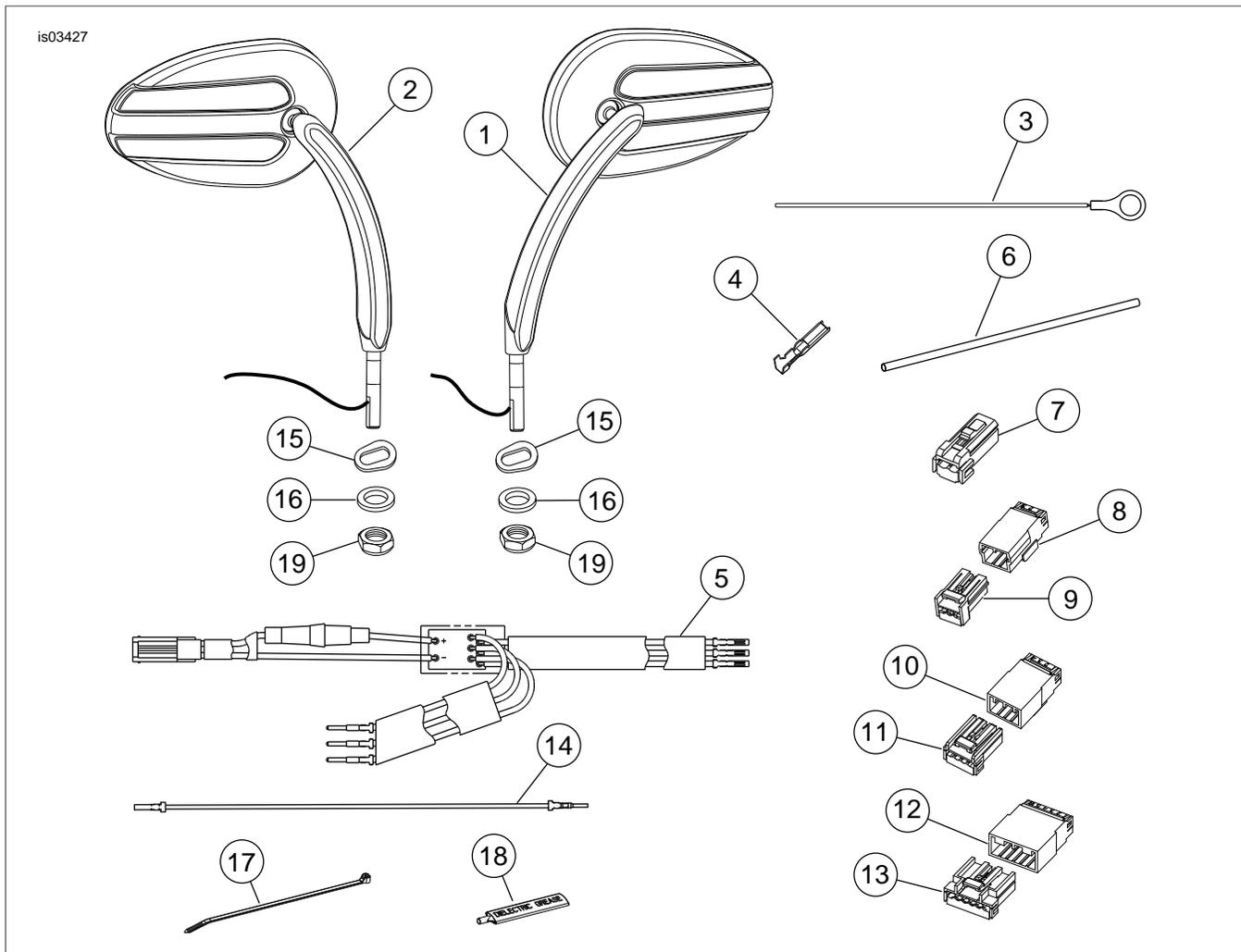


Figure 23. Service Parts: Lighted Mirrors

Table 4. Service Parts: Lighted Mirrors

Item	Description (Quantity)	Part Number	Item	Description (Quantity)	Part Number
1	Lighted mirror, left (with gray lead wire)	92055-07	10	Pin housing, 4-place (2)	73104-96BK
2	Lighted mirror, right (with gray lead wire)	92056-07	11	Socket housing, 4-place (2)	73154-96BK
3	Ground ring terminal (2)	Not Sold Separately	12	Pin housing, 6-place	73106-96BK
4	Terminal, socket (6)	72560-07	13	Socket housing, 6-place	73156-96BK
5	Y-Harness assembly (2) (includes fuse holder and fuse)	92060-07	14	Jumper wire assembly (2)	56913-06
	Fuse, 1 amp glass (2) (not shown)	56880-06	15	Wire guard (2)	72561-07
6	Conduit, black (2)	Not Sold Separately	16	Washer, flat (4)	6771A
7	Socket housing, 2-place (2)	73152-96BK	17	Cable strap (10)	10006
8	Pin housing, 3-place (2)	73103-96BK	18	Dielectric grease, 4-6 gram packet	Not Sold Separately
9	Socket housing, 3-place (2)	73153-96BK	19	Locknut, nylon insert 5/16-24 (2) - Sportster, FXSTS, FLSTS models only	7727