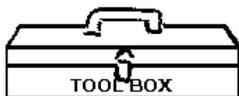


Read these instructions carefully and thoroughly before beginning work.

Before installing the accessory, carefully consider whether one possesses the necessary technical skills and workshop tools to complete the installation properly. Otherwise, any BMW Motorcycle Retailer will be glad to install this accessory.



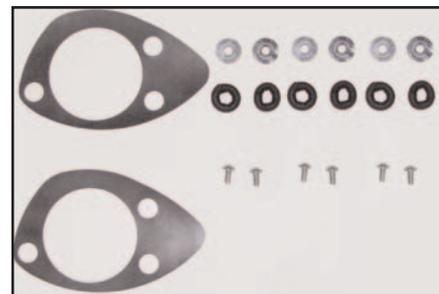
- Hex Key Wrench, 3mm
- Hex Key Wrench, 5mm
- Phillips Screwdriver, #2
- 10mm Wrench
- 13mm Wrench, (R1150RT)
- 19mm Wrench
- Slip Joint Pliers
- Side Cutting Pliers for (for cable ties)
- x-acto blade or other sharp blade.
- Scissors
- Adhesive Tape (masking or cellophane)

- Brad Point Drill Bit, 7/16" (11mm) *This works best, if not available, use a Center Punch To Start the Hole and a Spade Drill.*
- Hole Saw, 2 fi" or 65mm
- Electric Hand Drill
- Round File or Hand Grinder with Round Tip
- Motorcycle Owners Manual

Parts List

<u>Qty.</u>	<u>Part No.</u>	<u>Description</u>
1	90-910512-000	Side Illumination Light, Left
1	90-910513-000	Side Illumination Light, Right
1	10-117747-000	Template, Left
1	10-117748-000	Template, right

Bag 466



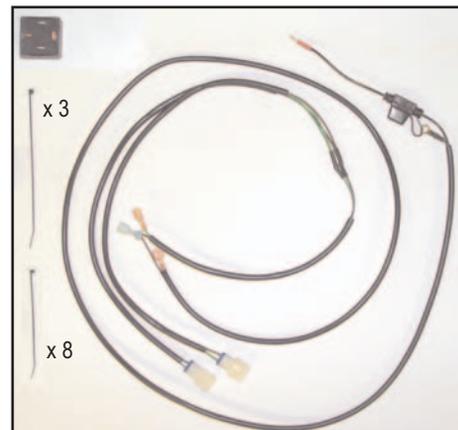
Bag#466

6	51-516511-000	Screw, Button Head, M5 x 10
6	44-443207-000	O-ring, .350 ID x .250 thick
6	49-490170-000	Clamping Washer
2	75-762411-000	Gasket, Z5100 Side Illumination Lights

Bag#467

1	80-830110-000	Wire Loom, Main Power
1	80-813801-000	Relay
8	44-448723-000	Cable Ties, 6.5"
3	44-448710-000	Cable Ties 11"

Bag 467



Bag#468

1	80-814652-000	Switch Assembly
1	51-515331-000	Screw, Hex Socket, M6-1.0 x 30
1	49-491607-000	Washer, Wave Lock M6 x 12
1	42-483021-000	Nut, Cap, M8
1	51-516460-000	Screw, Hex Socket, M8 x 60
1	42-483000-000	Nut, Cap M6
1	80-830103-000	Scotchlok Connector

Bag 468



Special notes and cautionary measures which can prevent damage to the motorcycle.



Tips for facilitation of operation, control and adjustment, as well as maintenance work.



Figure 1



Figure 2



Figure 3



There are 13 screws to remove from the left panel.



Figure 4

PREPARATION



Note: Left and Right are determined from the rider's position.
Note: It is noted when instruction pertains to only one of the two models the Z5100 will fit. i.e. R1100 RT or 1150 RT.

1. Position the motorcycle securely on its main stand or a work stand.



Note: Retain all the fasteners for the body panels, all these fasteners will be reused. Individual bags to hold fasteners into separate groups will be helpful!



REMOVAL OF MOTORCYCLE PARTS

1. Remove the rear view mirrors. (Refer to the motorcycle owners manual for the procedure to change the front turn signal bulbs.) Unscrew turn signal bulb and let hang. **Figure 1.**

2. Remove the dual seat.

3. Remove the black covers below the seat. **Figure 2.**

4. Remove the center cowl (belly pan) (**3mm Hex Key Wrench.**) **Figure 3.**

5. Remove the right and left side panels. **Figure 4.**

REMOVE DASH PANEL, R1150 RT; INTERNAL COVER, R1100 RT



Figure 5



Figure 5a



R1150RT

1. Remove the headlight adjuster knob (**Phillips Screwdriver.**) **Figure 5.**
2. Remove the retainer nut from the headlight adjuster shaft (**19mm Wrench.**) **Figure 5a.**
3. Remove the 8 screws from the top fairing cover (**3mm Hex Key Wrench.**) **Figure 6 and 7.**
4. Remove the 6 screws from the dash panel (**3mm hex key Wrench.**) Remove the dash panel.



R1100RT

1. Remove the internal dash. **Figure 8.**



Figure 6



Figure 7



Figure 8 R1100 RT Remove Internal Dash

REMOVAL/PREPARATION Continued

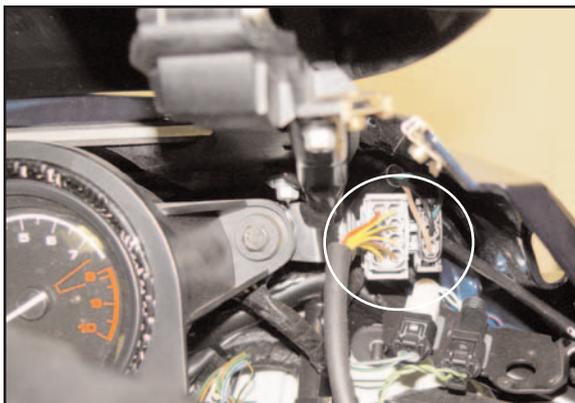


Figure 9



R1150 RT

5. Disconnect the connector for the FID. Squeeze the tabs. **Figure 9.**

6. Disconnect the connector for the fog lamps. Spread the tabs. **Figure 10.**



R1100 RT

1. If your model has speakers, remove the left speaker to gain access for wiring the switch.

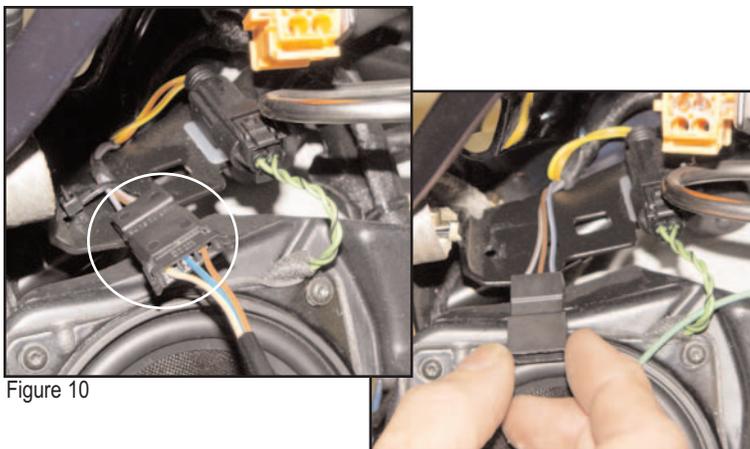


Figure 10

SWITCH INSTALLATION AND WIRING

1. Position the Switch Assembly at the left handlebar. It is mounted to the unused hole near the clutch lever (**5mm Hex Key, 13mm Open End Wrench.**) **Figure 11.**



R1150RT: use the M6 screw with the wave washer and nut.



R1100RT: use the M8 screw and nut.

2. Route the switch wire along the handlebar and down to the center fairing support. The non-terminated wire goes behind the instruments and to the left.

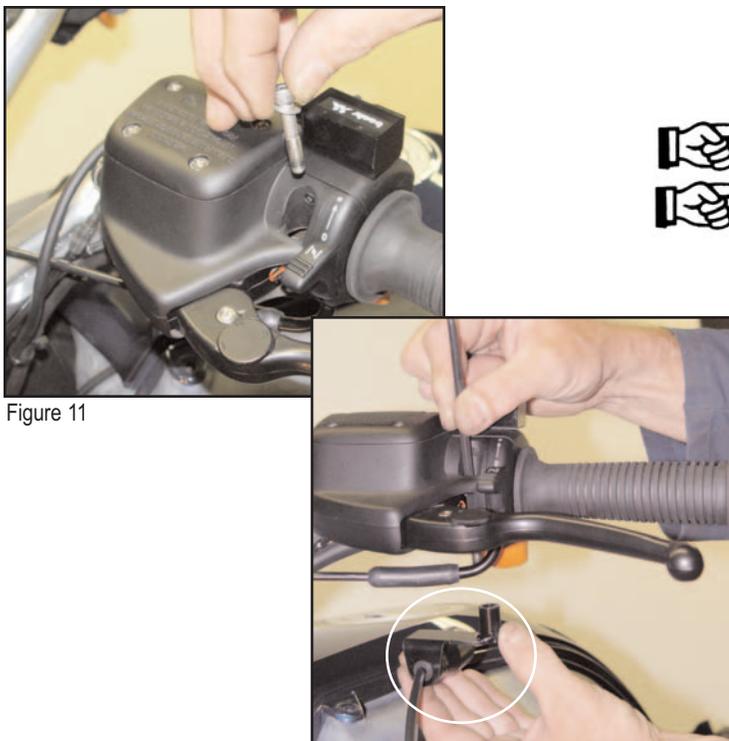


Figure 11

SWITCH INSTALLATION AND WIRING continued

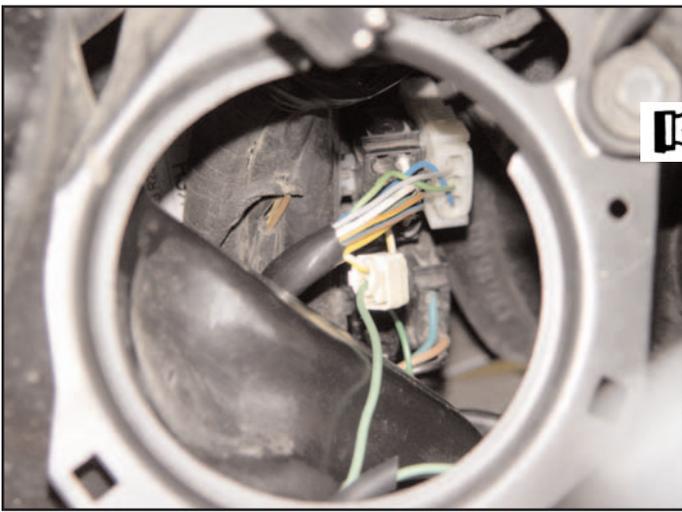


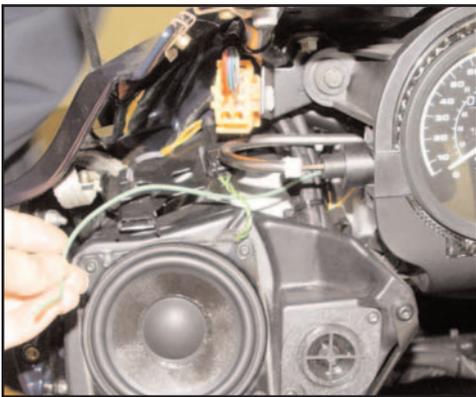
Figure 12



R1100RT

1. Using a scotchlok connector attach the non-terminated green wire to the White with Yellow Tracer wire at the power to high / low beam switch in the connector block. (On R1100 RTs with speakers, this block is located behind the left speaker.)

Make sure there is adequate slack in the switch wire so the handlebar can turn freely. Secure the switch wire with cable ties. **Figure 12.**



R1150RT

1. Attach the non-terminated wire to the Gray with Blue Tracer wire at the connector for the fog lamps using a Scotchlok connector. **Figure 13.**

2. Make sure there is adequate slack in the switch wire so the handlebar can turn freely. Secure the switch wire with cable ties. **Figure 14.**

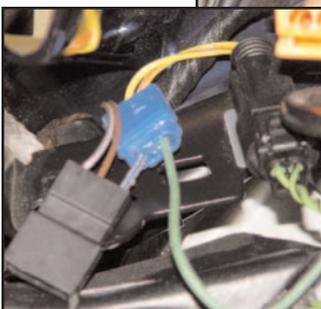
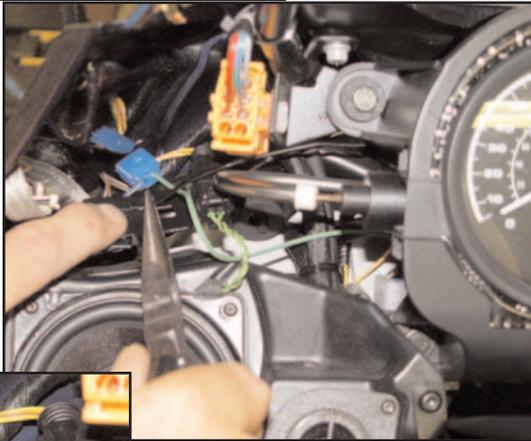


Figure 13

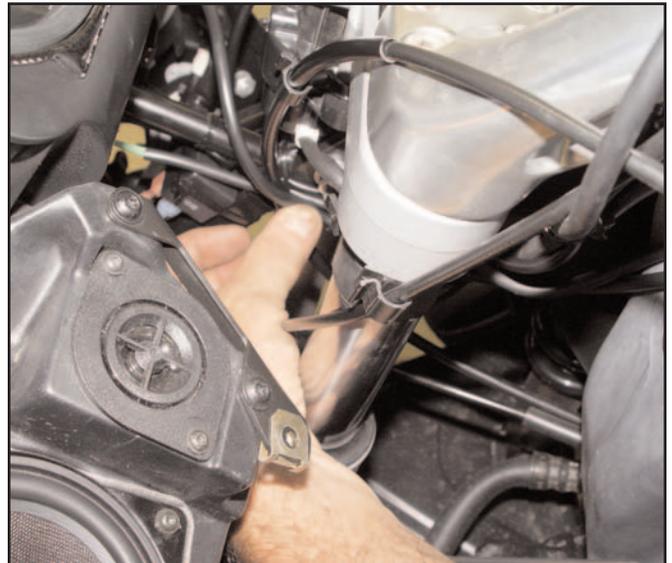


Figure 14

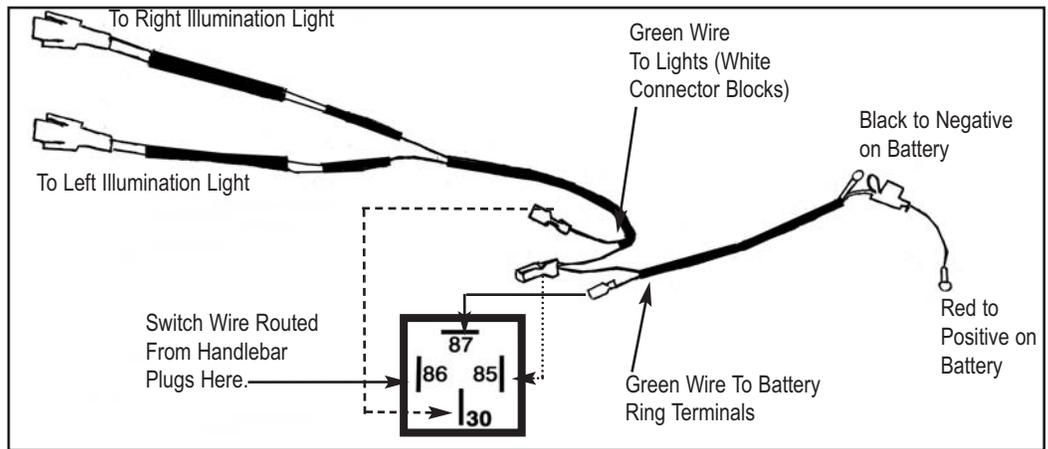


Figure 15

WIRING - Main Power Loom

1. Attach the relay to the main power wire loom. **Figure 15.**
2. Position the main power wire loom along the fuel tank. **Figure 16.** The two ring terminals will attach to the battery. Run the end with the two plastic connector blocks between the forks and into the upper fairing. Secure the loom with cable ties to the fairing support.
3. Connect the terminated wire from the switch wire to the relay.
4. Using cable ties, secure the Main Power Wire Loom and relay so it does not contact the forks while turning. **Figure 17.**

Note: Use the cable tie to secure the relay to the center fairing support.



Figure 16

WIRING - Test

1. Connect the Side Illumination Lights to the Main Power Wire Loom. **Figure 18.**
2. Turn the ignition key to "ON". Depress the Switch. The Lights should illuminate.
3. If the lights fail, thoroughly examine the installation. Correct any problems before continuing.



Figure 17

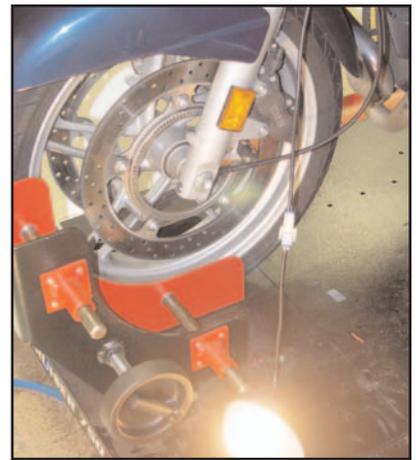


Figure 18

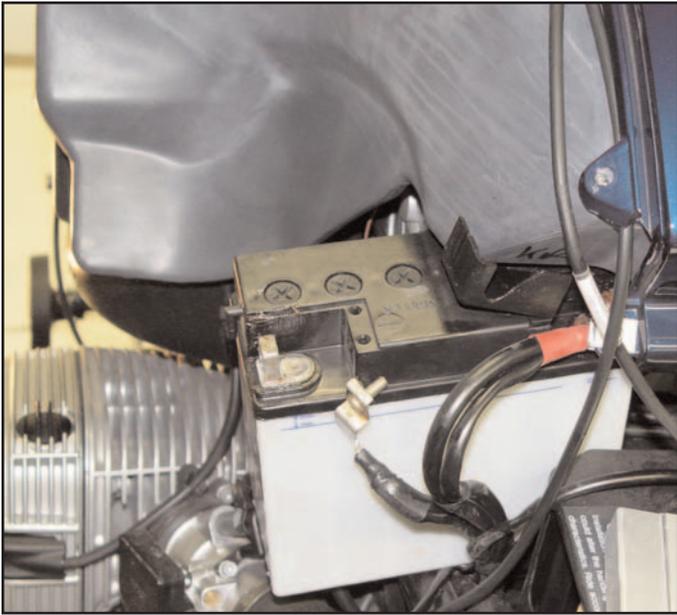


Figure 19



Figure 20



Figure 21

WIRING - Main Power Loom to Battery

1. Remove the battery. Refer to the motorcycle owner's manual for battery removal. **Figure 19.**
2. Connect the ring terminals to the battery. Red goes to the positive (**Figure 20**) and Brown to the negative side of the battery. **Figure 21.**
3. Reinstall the battery.



Be sure to secure Power Loom and any extra length of wire well.

Use cautionary measures to assure that the Power Loom is away from the engine, exhaust, front wheel and forks. Secure any extra length with tie wraps, then secure to fairing support.

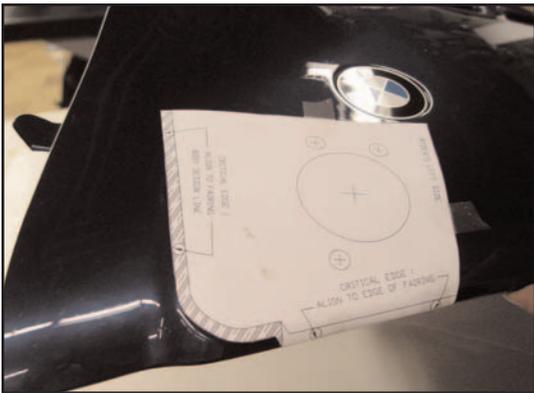


Figure 22



Figure 23

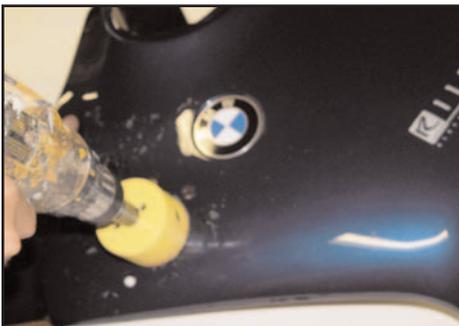


Figure 24



PREPARE THE SIDE PANELS

1. Carefully cut the Templates along the lines indicated.
2. Tape the Templates onto the left and right side panels. Make sure to align the Templates at the critical lines. **Figure 22.**
3. Using the Brad Point Drill (or Center Punch) mark the centers of the holes, as indicated on the Templates. **Figure 23.**
4. Remove the Templates.
5. Using the 7/16" **Brad Point Drill bit and Electric Drill**, drill the three small holes into each side panel.
6. Using the **Hole Saw and the Electric Drill**, saw the large center holes. Use a low drill speed. Make sure the saw does not wander. **Figure 24.**
7. Test fit the Side Illumination Light into each side panel. From the inside of the panel, mark where more material needs to be removed. Use the **Round File (or Grinder)** to adjust the holes so the Side Illumination Lights fit well. **Figure 25.**



Note: Remove small amounts of material at a time. Recheck the fit regularly during this adjustment operation.



Figure 25



Figure 26



Figure 27



Figure 28

INSTALL THE SIDE ILLUMINATION LIGHT ASSEMBLIES

1. Place a Gasket on the outside surface of a side panel and position the Light Assembly. **Figure 26.**
2. On the inside surface of the side panel, place an O-ring on each screw boss, then a Clamping Washer and start a Button Head Screw. **Figure 27.**
3. Tighten the 3 Button Head Screws securely.
4. Repeat steps 1 through 4 on the other side panel.
5. Reinstall the side panels.
6. Connect the lights to the main power wire loom. **Figure 15.**
7. Secure the wire looms with cable ties. Make sure the wires do not contact the fork while turning.
8. Reinstall the dash panel and the remaining body panels and the seat.



Note: Clamping washer will conform to the tight clearance **Figure 28.**



Note: The O-ring must compress for the Screw to start.

MAINTENANCE

The Side Illumination Lights are coated aluminum. **Do not use chrome or metal polish.** Allow the lights to cool, then wash as you would the rest of the motorcycle.

To replace a bulb, remove the affected side of the Engine Spoiler. Unscrew the cap inside the Side Illumination Light casting. This will give access to the bulb. Replace the bulb and re-assemble in reverse order of disassembly.

Side Illumination Lamp Assembly Replacement:
Part No. 90-901400-000