



Circle Earth System

Part No. 48004-AK001

Universal Type

Installation

1. Installation of the Circle Plate

First, decide on a location where the circle plate (the central unit where all the wires are connected to) is going to be placed. Depending on the layout of the engine, 2 separate types of setup is possible. Choose between the Direct Type or the Separate Type to better fit your need.

A. Direct Type :	The Circle Plate is mounted on top of the negative (-) terminal of the battery.
B. Separate Type:	The Circle Plate can be placed away from the negative (-) terminal of the battery for vehicles that do not have enough clearance above the battery.

A. Direct Type

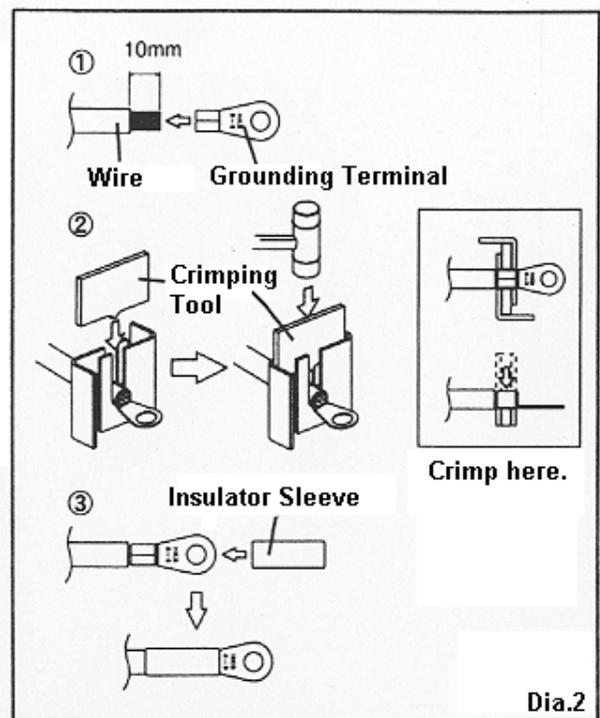
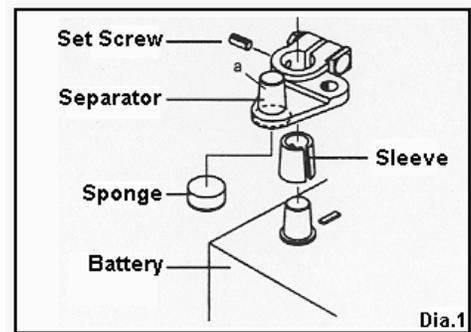
- (1) Remove the battery cable from the negative (-) terminal.
- (2) Use the Sleeve and Set Screw to secure the Separator onto the negative (-) terminal. (Diagram 1)
If the negative (-) terminal is too thick for the Sleeve, install it onto section (a) of the Separator. (Diagram 1)
If there is a gap between the battery and Separator, stick the included Sponge onto the Separator as shown in the diagram. (There are 2 Sponges in the kit. Use the second one if necessary.)
- (3) After the placement of the Circle Plate is done, cut the Wire to the appropriate length of the grounding point. (A maximum of 12 Wires can be made from the parts included in the kit.)

Note:

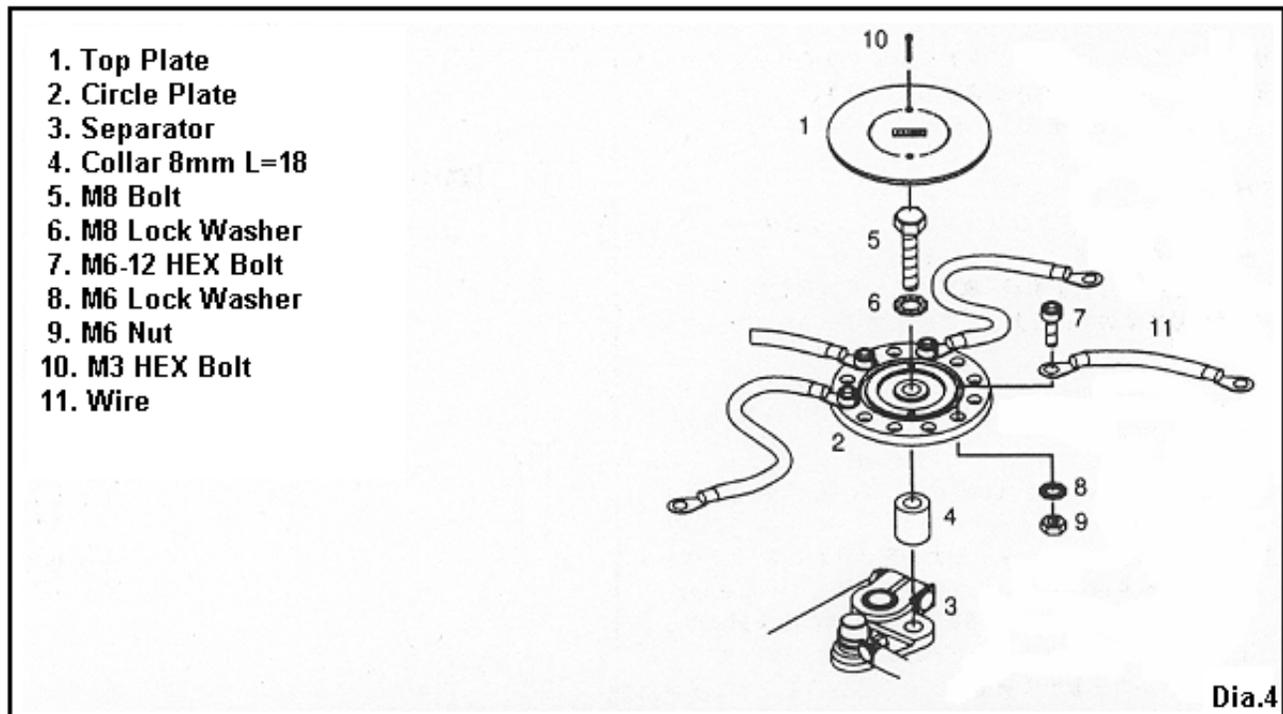
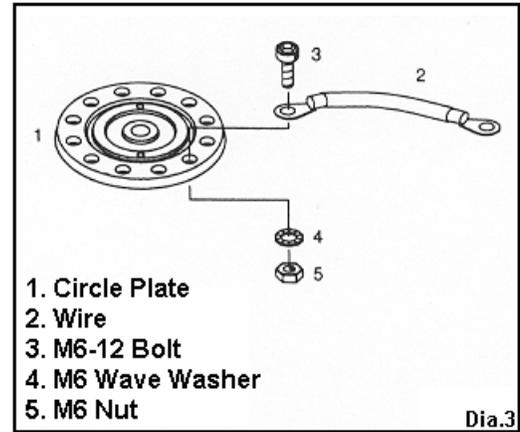
Possible grounding points are usually the engine block, cylinder head, intake manifold, alternator, chassis, and transmission. Depending on the vehicle that is going to be installed on, effective grounding points may vary.

- (4) Refer to Diagram 2 for installation of the Grounding Terminal onto the cut Wire.

- ① Strip the Wire about 10mm and insert the Grounding Terminal.
- ② Set the Wire and Grounding Terminal on the included Crimping Tool, then tap it with a hammer about 3 to 4 times. Make sure the Grounding Terminal is secure. When doing this, make sure the section that is going to be crimped lies in the center of the Crimping Tool.
- ③ Cover the crimped area with the included Insulator Sleeve. (does not need to be heat shrunk)



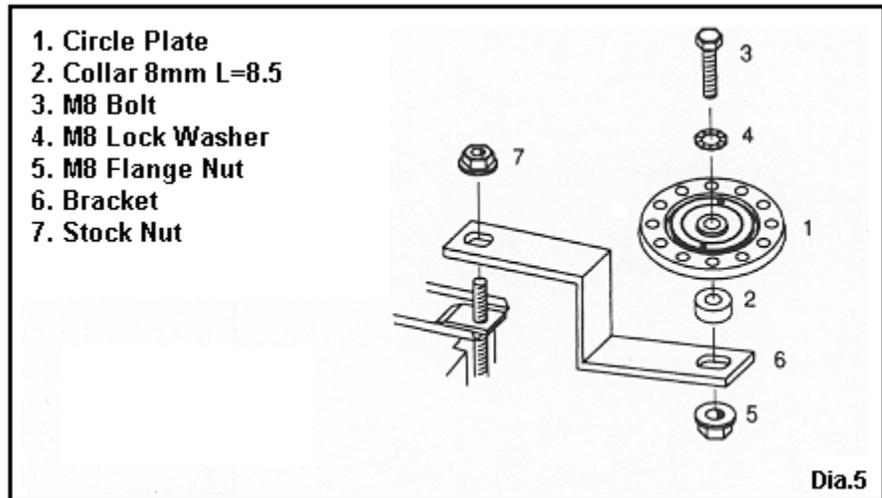
- (5) Connect the Wire to each grounding point.
- (6) Use the M6 Bolt, Lock Washer, and Nut that are included in the kit to attach each Wire to the Circle Plate. (Diagram 3)
- (7) Connect the negative (-) cable onto the terminal of the Separator.



- (8) Use the M8 Bolt and Collar to install the Circle Plate onto the Separator. When doing this, be careful not to over tighten the bolt. (Recommended torque: 2.5~3.5N/m (0.25~0.35kg/m))(Diagram 4)
- (9) Make sure each of the terminals are tightly secured.
- (10) Use the included Tie Wraps to secure the loose wires onto other harnesses to keep it from moving around.
- (11) Use the M3 HEX Bolt to attach the Top Plate onto the Circle Plate. (Diagram 4)

B. Separate Type

- (1) Remove the battery cable from the negative (-) terminal.
- (2) Install the Bracket that the Circle Plate is going to be installed to. The 6mm oval hole of the Bracket is the side that should be on the chassis of the vehicle. Decide on an optimal location to secure it. (For example it may be installed on the battery bracket.) (Diagram 5)
- (3) After securing the Bracket, install the Circle Plate using necessary parts. When doing this, be careful not to over tighten the bolt. (Recommended torque: 2.5~3.5N/m (0.25~0.35kg/m))(Diagram 5)



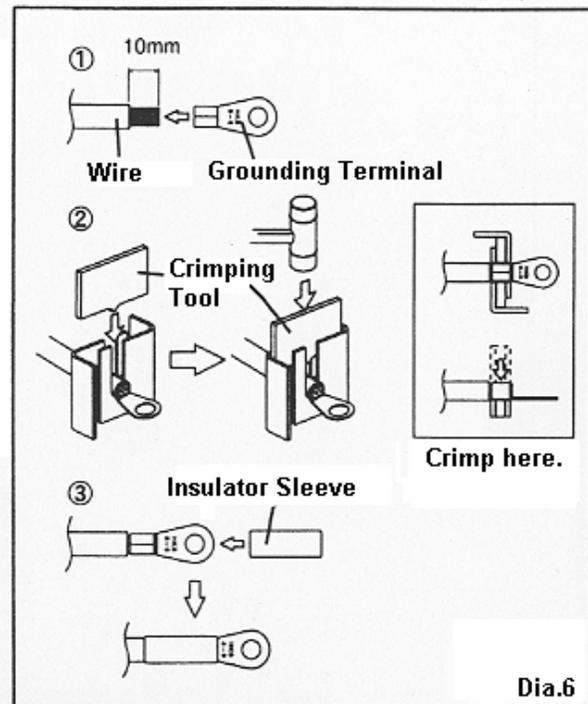
- (4) After the placement of the Circle Plate is done, cut the Wire to the appropriate length of the grounding point. (A maximum of 12 Wires can be made from the parts included in the kit.)

Note:

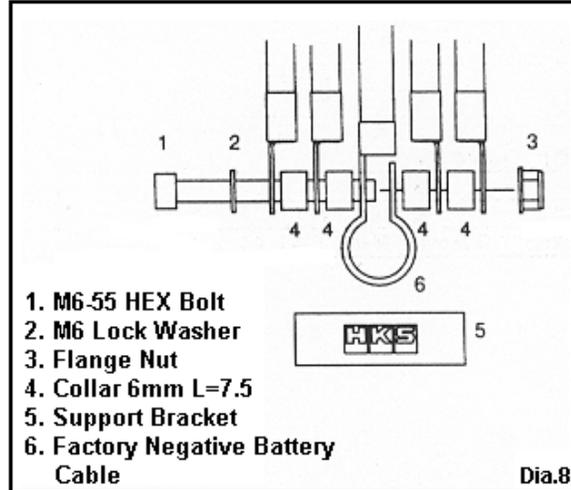
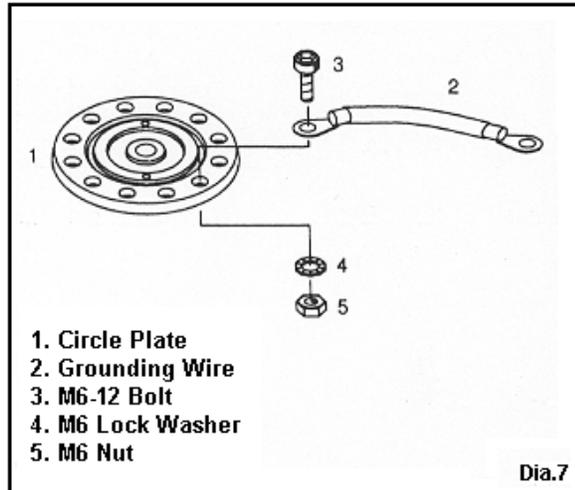
Possible grounding points are usually the engine block, cylinder head, intake manifold, alternator, chassis, and transmission. Depending on the vehicle that is going to be installed on, effective grounding points may vary.

- (5) Refer to Diagram 6 for installation of the Grounding Terminal onto the cut Wire.

- ① Strip the Wire about 10mm and insert the Grounding Terminal.
- ② Set the Wire and Grounding Terminal on the included Crimping Tool, then tap it with a hammer about 3 or 4 times. Make sure the Grounding Terminal is secure. When doing this, make sure the section that is going to be crimped lies in the center of the Crimping Tool.
- ③ Cover the crimped area with the included Insulator Sleeve. (does not need to be heat shrunk)



- (6) Connect the wire to each grounding point.
- (7) Use the M6 Bolt, Lock Washer, and Nut that are included in the kit to attach each Wire to the Circle Plate.
(Diagram 7)
- (8) Install the Wires and Support Bracket onto the factory negative battery cable using necessary parts. (Diagram 8)



- (9) Make sure each of the terminals are tightly secured.
- (10) Reattach the factory negative battery cable onto the negative (-) terminal. Use the M6 Washer (Gold Plated) to adjust the clearance when assembling the Support Bracket. (Diagram 9)
- (11) Use the included Tie Wraps to secure the loose wires onto other harnesses to keep it from moving around.
- (12) Use the M3 HEX Bolt to attach the Top Plate onto the Circle Plate. (Diagram 10)

Parts List

No.	Description	Qty	Image	Notes	No.	Description	Qty	Image	Notes	No.	Description	Qty	Image	Notes
1	Top Plate	1			11	Support Bracket	1			21	HEX Bolt	8		M6-12
2	Circle Plate	1			12	Lock Washer	1		M6	22	Lock Washer	8		M6
3	Spacer	1		8mm L=8.5	13	Flange Nut	1		M6	23	Nut	8		M6
4	Bolt	1		M8-35	14	Bracket	1			24	Crimping Tool	1		
5	Lock Washer	1		M8	15	Separator	1			25	HEX Wrench	1		3mm
6	Flange Nut	1		M8	16	Spacer	1		8mm L=18	26	HEX Wrench	1		6mm
7	HEX Bolt	2		M3-15	17	Wire	1		L=5000	27	Tie Wrap	10		
8	HEX Bolt	1		M6-55	18	Grounding Terminal	8		φ 8-8	28	Sponge	2		
9	Collar	4		6mm L=7.5	19	Grounding Terminal	8		φ 8-6	29	E05251-K00010-00 Instruction Manual	1		
10	Plain Washer	3		M6	20	Insulator Sleeve	16			30				