# **Multipurpose Camera Aiming**

## **Special Tool Required**

Image	Description/Tool Number			
Ť	Alignment Set 07AAJ-STKA210			
	Target Set 07AAK-5K0A100			
	Stand Pole (Aluminum) 07AAK-5K0A120*			

Imaga	Description/Tool Number			
Image	Description/Tool Number			
	Target Adjuster 07AAK-5K0A110			
	Stand 07AAJ-TK8A100*			
	Stand Set 07AAJ-STKA220*			

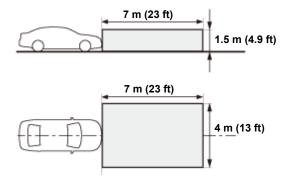
\*: Switch out the included plastic pole for 07AAK-5K0A120 Aluminum Stand Pole, and use Stand 07AAJ-TK8A100 or Stand Set 07AAJ-STKA220 for aiming.

# Adjustment

#### NOTE:

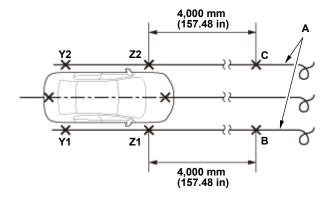
- The multipurpose camera unit must be re-aimed if the multipurpose camera unit or windshield is removed or replaced. The LKAS and ACC indicators (amber) will blink if the aiming process is not completed correctly. If DTCs are indicated, do the indicated DTCs first. If the DTCs are not repaired, you cannot complete the multipurpose camera aiming procedure:
  - Static Camera Aiming Incomplete: <u>DTC B2A60-54</u>

- If the vehicle you are aiming was involved in a collision or if you suspect the alignment is out of specifications, you must perform a wheel alignment prior to aiming the multipurpose camera unit.
- Cautions for the operation environment:
  - Multipurpose camera aiming should be done on a flat place.
  - To aim the multipurpose camera, you need the following amount of open space in front of the vehicle: 7 m (23 ft) measured from the front bumper, 4 m (13 ft) width, and 1.5 m (4.9 ft) height.
  - Make sure the vehicle is not facing any direct light sources as this will affect the static camera aiming.
  - Make sure there are no black and white checkered or dark and light alternating patterns directly behind the targets as this will affect the static camera aiming.



#### Set up the vehicle:

- Aiming the multipurpose camera requires the HDS.
- Do not put any objects on the instrument panel.
- Remove all cargo from the vehicle except the tool kit and the spare tire.
- Make sure that there are no stains, dust, or dirt on the lens of the multipurpose camera unit and the windshield area where the camera is mounted.
- Make sure that all doors are closed.
- Make sure the suspension has not been modified.
- Make sure all the tire sizes are correct and that their pressure is correct.
- Make sure the fuel tank is full.
- Make sure the steering wheel is pointed straight ahead, and do not turn it after setting the vehicle.
- Shift the shift lever to P (CVT) or neutral (M/T) position, and apply the parking brake.
- When marking on the floor surface, use suitable tape to mark the exact locations.
- 1. Before Aiming Set



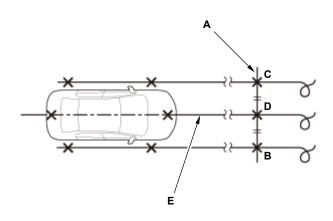
#### Marking of the Target Position:

- Make points (Z1, Y1, Z2, and Y2) and set the cord along the center-line of the vehicle.
- 2. Pull a string (A) between point Z1 and point Y1, and tape both ends of the string on the floor surface.

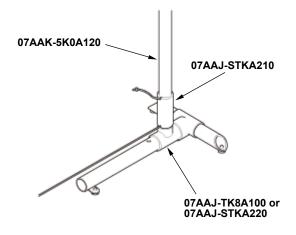
NOTE: Repeat this step for the opposite side for points Z2 and Y2.

3. Measure and make a new point B on the floor surface in front of the vehicle 4,000 mm (157.48 in) from point Z1.

NOTE: Repeat this step for the opposite side, and mark a new point C.



4. Set the string (A) between point B and point C, and tape both ends of the string on the floor surface. Mark a new point D where the string crosses with the center-line (E).



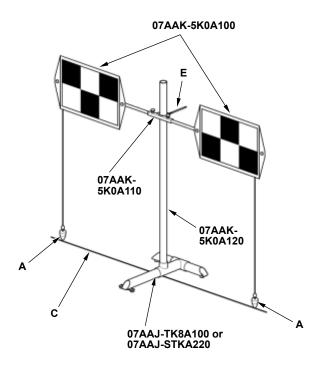
# **Special Tools Set-Up, Target Pattern Surface Height Adjustment, and Positioning:**

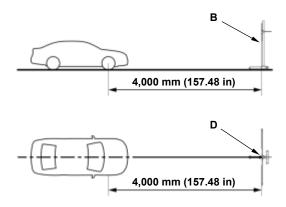
NOTE: Switch out the included plastic pole for 07AAK-5K0A120 Aluminum Stand Pole.

5. Use the stand pole (aluminum).

NOTE: The plastic pole is too low to align the camera.

6. Route the cord through the collar and place it on the aiming stand.

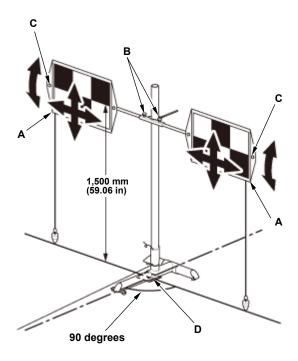




- 7. Assemble the aiming target.
  - NOTE: For correct orientation of the aiming target panels, make sure the target patterns match the illustration.
- 8. Dangle two plumb bobs (A) from the lower corners of the target to the floor and secure the plumb bob string to the target with tape.
- 9. Position the aiming target assembly (B) at point D.
- 10. Make sure that both plumb bobs touch directly on the line (C). If they do not, loosen the pointer (E) and rotate the target assembly as necessary.

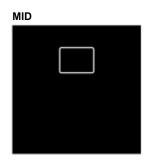
## 11. Adjust the aiming target panel (A):

- -1. Put the level on the target panel surface. Turn the adjustable screws (B), and adjust the vertical angle of target panel surface so that the air bubble in the level is centered.
- -2. Put the level on the target panel. Turn the adjustable screws (C), and adjust the horizontal angle of target panel surface so that the air bubble in the level is centered.
- -3. Adjust the height of the target panel and make sure to have 1,500 mm (59.06 in) between the floor surface and the horizontal center line of the panel.



NOTE: The horizontal center line is a horizontal division line on the panel where the black and white boxes meet.

### 2. Multipurpose Camera - Static Camera Aim



- 1. Apply the parking brake.
- 2. Connect the HDS.
- 3. Check for DTCs with the HDS.

NOTE: If DTC B2A60-54 is indicated, troubleshoot the indicated DTC first.

- 4. In the DRIVING SUPPORT MENU, then INTEGRATED DRIVER SUPPORT SYSTEM, then ADJUSTMENT, then select STATIC CAMERA AIMING on the HDS
- 5. Press ENTER on the HDS to enter the aiming mode.

NOTE: A " $\square$ " will be displayed on the MID during camera aiming.

6. Confirm STATIC CAMERA AIMING IS COMPLETE on the HDS and then press ENTER.

NOTE: If the aiming has failed, you must start the static camera aiming procedure again.

7. Turn the vehicle to the OFF (LOCK) mode.