Preparation

Part Number(s): PT907-00090, PT907-07190, PT907-07191, PT907-07192

**Kit Contents** 

Item#	Quantity Reqd.	Description
1	1	Hood Protective Film
2	1	Hood Extension Protective Film
3	1	Front Fender Protective Film
		(Driver Side, Passenger Side)
4	1	Mirror Protective Film (DS, PS)
5	1	Door Cup Protective Film
		(DS Front, PS Front, DS Rear,
		PS Rear)
6	1	Care Card

**Hardware Bag Contents** 

Item#	Quantity Reqd.	Description
1	None	

**Additional Items Required For Installation** 

Item#	Quantity Reqd.	Description
1	None	

#### **Recommended Tools**

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Personal & Vehicle	Notes
Protection	
None	
Special Tools	Notes
Squeegee	4" 3M <sup>TM</sup> Orange Applicator
	#71607
<b>Installation Tools</b>	Notes
Spray Bottles	
Pump Sprayer	
Towel	Wypall® L40 All-Purpose
	Wipers
"T" Shirt Material	Supplied by CTC Supplies
Water Blade	12" California® Water
	Blade
Dropper	Measures ml
Heat Gun	
<b>Special Chemicals</b>	Notes
Wetting Agent	Johnson's® Baby
	Shampoo(5 ml to 64oz. of
	water)
Alcohol Solution	70% isopropyl Alcohol (mix
	50% Alcohol and 50%
	water)

**Recommended Sequence of Application** 

Item#	Accessory	
1	Hood Protective Film	
2	Hood Extension Protective Film	
3	Front Fender Protective Film (DS,PS)	
4	Mirror Protective Film (DS, PS)	
5	Door Cup Protective Film	
	(DS Front, PS Front, DS Rear, PS Rear)	
6	Care Card	

\*Mandatory

**Vehicle Service Parts** (may be required for reassembly)

Item#	Quantity Reqd.	Description
1		
2		
3		

#### Legend



**STOP:** Damage to the vehicle may occur. Do not proceed until process has been complied with.



**OPERATOR SAFETY:** Use caution to avoid risk of injury.



CAUTION: A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.



**TOOLS & EQUIPMENT:** Used in Figures calls out the specific tools and equipment recommended for this process.



**REVISION MARK:** This mark highlights a change in installation with respect to previous issue.

# **TOYOTA** Procedure

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:-

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

Please see your Toyota dealer for a copy of this document.

# 1. Prepare for the Installation.



- (a) To ensure the best results during an installation you must set-up an installation area that is safe and clean. The following items should be considered when selecting an area for installation:
  - (1) Installation should be performed in an ambient temperature from 45° Fahrenheit to 95° Fahrenheit. Adjust wetting solution according to the ambient temperature. The following is stated for the 64 oz. Wetting Agent.
    - (a)  $45 \degree F 65 \degree F = 4 \text{ ml Baby Shampoo}$
    - (b)  $65 \degree F 75 \degree F = 5 \text{ ml Baby Shampoo}$
    - (c)  $75 \,^{\circ} \, \text{F} 85 \,^{\circ} \, \text{F} = 6 7 \, \text{ml Baby}$ Shampoo
    - (d)  $85 \,^{\circ} \, \text{F} 90 \,^{\circ} \, \text{F} = 7 8 \, \text{ml Baby}$ Shampoo
  - (2) Avoid installing in direct sunlight or extreme heat environment.
  - (3) Avoid installing material when vehicle surface is over 90° Fahrenheit.
  - (4) Do not attempt to apply film during windy conditions.

- (5) Keep installation area free of dust, grease, or other small particles that can become airborne, i.e. wax dust, paint overspray, etc.
- (6) Installation area must be well lit.

#### 2. Prepare the Vehicle Surface.



- (a) Before beginning any installation, the installer should perform the following steps to prepare the vehicle's surface:
  - (1) Remove vehicle wrap-guard material from application areas.
  - (2) Wash / clean application surface thoroughly.
  - (3) Remove any contaminations such as grease, oil, wax, dirt, bug residue, or road tar with approved VDC cleaner.
  - (4) Inspect painted surfaces for existing damage or for fresh, loose, and/or scratched paint. It is recommended that any existing damage be repaired before installation.
  - (5) Clean the vehicle using Baby Shampoo Solution and a towel.
  - (6) Spray the vehicle with Baby Shampoo Solution generously and remove with California® Water Blade.

#### 3. Remove the Film Material From the Liner.

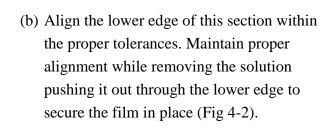
(a) Check pattern accuracy with the vehicle. Make sure all necessary pieces are present.

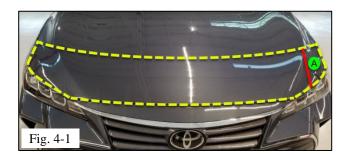


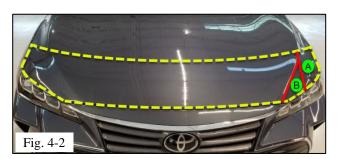
- (b) Before handling the film, make sure that hands are clean. Then proceed to spray hands with the wetting agent to prevent transfer of fingerprints to the material. Keep hands wet throughout the install procedure.
  - (c) Remove material from liner. Continue to spray material with the wetting agent to prevent the adhesive side from sticking to itself. Keep hands wet.



(a) Align the driver side outer edge of the piece where the hood meets the fender. Remove the water from beneath the material with the squeegee so that it is secured (Fig 4-1).

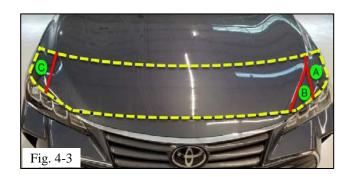




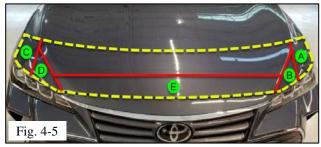


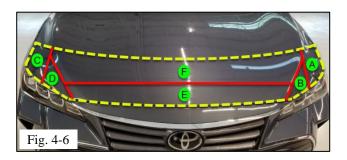
Procedure

**TOYOTA** 





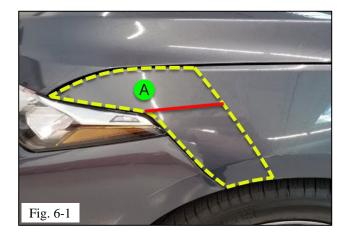




- (c) Apply your alcohol solution underneath the outer edge of this section. Pull the film from right to left to align the outer and lower edges. Hold the film in place and use the squeegee in the other hand to secure it (Fig 4-3).
- (d) Align the lower edge of this section within the proper tolerances. Maintain proper alignment while removing the solution pushing it out through the lower edge to secure the film in place (Fig 4-4).
- (e) Apply a small amount of alcohol solution along the lower front edge. Position the material within the proper tolerances and secure it with the squeegee pushing all solution towards the center and then out through the lower front edge (Fig 4-5).
- (f) Using upward overlapping strokes with the squeegee remove the remaining water from beneath the material. The water will leave from beneath the material only out the top edge of the piece. Avoid forcing water back through an area that has already been tacked to prevent distortion (Fig. 4-6).
- (g) Check surface for bubbles or any other defects before continuing.

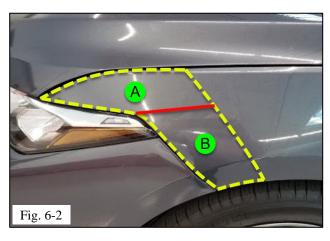
#### 5. Seal All the Edges.

(a) This will be necessary after each individual piece. With the "T" shirt material wrapped around the hand, apply heat with the heat gun from 6 to 8 inches away from the vehicle panel. Angle the heat gun to heat the glue side of the material as opposed to the clear coat side. First, apply heat, and then wipe the material edge down with the "T" shirt wrapped hand. The film will be very pliable so take care to not distort the film. This process should be applied to the entire outer edge of the piece to seal the piece completely.



#### 6. Front Fender Installation Procedure.

(a) Align the inner edge near the hood and the lower corner near the headlight within the proper tolerance. Hold the film in place and remove the solution beneath with the squeegee to secure it. Be sure to keep edges within tolerance during process (Fig. 6-1).



(b) Apply a small amount of alcohol solution under the lower edge. Pull the material down to align the lower edge near the wheel well. Hold in place with one hand and use the squeegee in the other to remove all solution pushing it out through the lower edge of the piece (Fig. 6-2).



- (c) Check surface for bubbles or any other defects before continuing.
  - (d) Repeat the same sequence of steps to apply the opposing side.

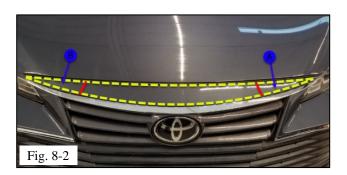
## 7. Seal All the Edges.

(a) This will be necessary after each individual piece. With the "T" shirt material wrapped around the hand, apply heat with the heat gun from 6 to 8 inches away from the vehicle panel. Angle the heat gun to heat the glue side of the material as opposed to the clear coat side. First, apply heat, and then wipe the material edge down with the "T" shirt wrapped hand. The film will be very pliable so take care to not distort the film. This process should be applied to the entire outer edge of the piece to seal the piece completely.

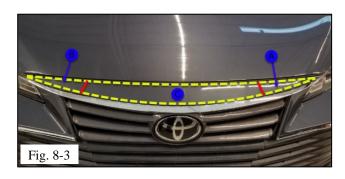
#### 8. Hood Extension Installation Procedure.



(a) Align the upper and lower edges and remove the solution to secure the film (Fig. 8-1).



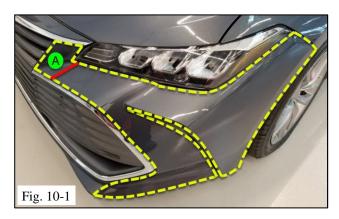
(b) Slightly pull the material across the front of the vehicle only enough to align the film properly. Hold in place and tack down with the squeegee (Fig. 8-2).



- (c) Position the material and hold in place with one hand while using the squeegee in the other to push the solution towards the center and then out through the upper and lower edges (Fig. 8-3).
- (d) Check surface for bubbles or any other defects before continuing.

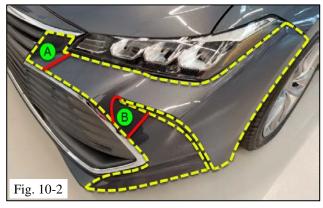
#### 9. Seal all edges.

(a) This will be necessary after each individual piece. With the "T" shirt material wrapped around the hand, apply heat with the heat gun from 6 to 8 inches away from the vehicle panel. Angle the heat gun to heat the glue side of the material as opposed to the clear coat side. First, apply heat, and then wipe the material edge down with the "T" shirt wrapped hand. The film will be very pliable so take care to not distort the film. This process should be applied to the entire outer edge of the piece to seal the piece completely.

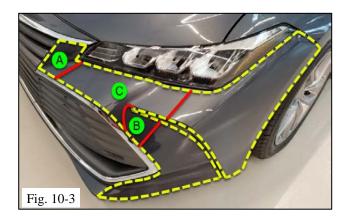


# 10. Front Bumper Installation Procedure.

(a) Align the edges and remove the solution to secure the film in place (Fig. 10-1).

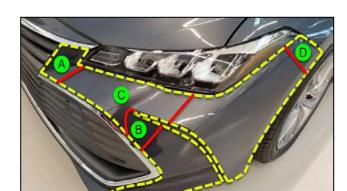


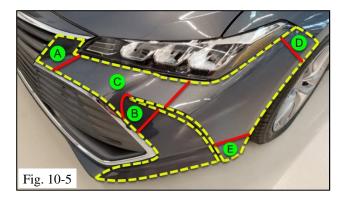
(b) Apply alcohol solution under this section. Pull the material from left to right to align the front edge near the grill as well as the beginning point of where the part breaks into two sections. Hold the tension of the stretch with one hand while using the other to remove the solution from underneath the material sing left to right motions (Fig. 10-2).

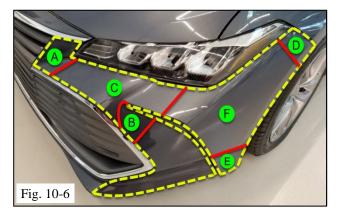


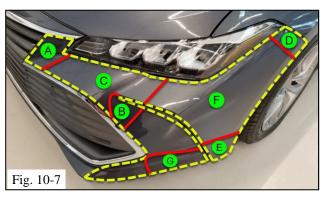
(c) Spray a small amount of alcohol solution underneath the top and bottom edges of this section. Align properly and remove the solution to secure the film in place (Fig. 10-3).

Fig. 10-4





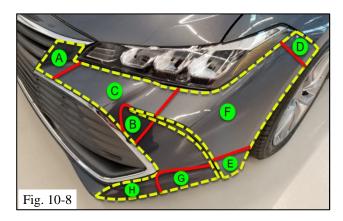




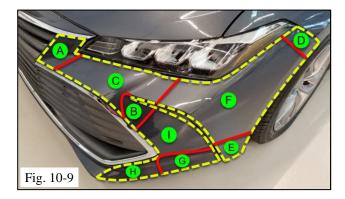
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- (d) Apply alcohol solution underneath the top edge and the outside edge near the wheel well. Stretch the material out and up to align those edges. Hold the piece in position with one hand while using the other to tack it down with the squeegee. Be sure film is secure before releasing the tension (Fig. 10-4).
- (e) Apply alcohol solution underneath the lower edge of this section. Pull the material down to align the lower and outer edges. Hold the piece in position with one hand while using the other to tack it down with the squeegee. Be sure the film is secure before releasing the tension (Fig. 10-5).
- (f) Adjust the film so that the edges are aligned properly. Remove the solution from underneath the material. Apply alcohol solution as needed to assist in working down any fingers that remain (Fig. 10-6).

(g) Apply alcohol solution underneath the lower edge of this section. Pull the material down to align the lower and outer edges. Hold the piece in position with one hand while using the other to tack it down with the squeegee. Be sure the film is secure before releasing the tension (Fig. 10-7).



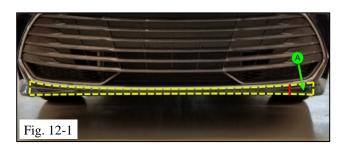
(h) Apply alcohol solution to the front point of this section. Pull the film only enough to alleviate any fingers that are present and use your fingertips to wipe the piece in place securing it where the alcohol was applied. Follow up with the squeegee to force out the solution that remains (Fig. 10-8).



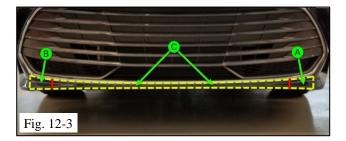
- (i) Push all remaining solution out from underneath the material to secure the film in place (Fig. 10-9).
- (i) Check surface for bubbles or any other defects before continuing.
  - (k) The same sequence of steps will be used to apply the opposing side.

#### 11. Seal all of the Edges.

(a) This will be necessary after each individual piece. With the "T" shirt material wrapped around the hand, apply heat with the heat gun from 6 to 8 inches away from the vehicle panel. Angle the heat gun to heat the glue side of the material as opposed to the clear coat side. First, apply heat, then wipe the material edge down with the "T" shirt wrapped hand. The film will be very pliable so take care to not distort the film. This process should be applied to the entire outer edge of the piece to seal the piece completely.







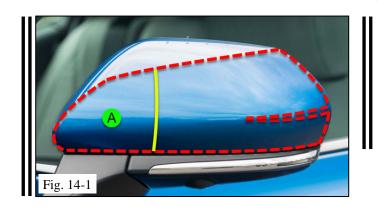
# 12. Lower Lip Installation Procedure.

- (a) Align the outer edge where the two parts will seem together. Apply alcohol solution to all edges of this section. Tack down the film so that it is secure and not overlapping the other piece (Fig. 12-1).
- (b) Apply alcohol solution underneath the outer edge of this section. Pull the material over to align the outside edge with the other part that was previously installed. Hold the tension of the stretch with one hand while using the other to tack the matrial in place (Fig. 12-2).
- (c) Work your way back across the piece positioning the film using the top edge as a guide while lightly brushing the material in place with the squeegee. Once the film is secure use more pressure to remove any remaining solution. Use alcohol solution as needed to ensure placement is kept during process (Fig. 12-3).
- (d) Check surface for bubbles or any other defects before continuing.

# **TOYOTA** Procedure

## 13. Seal all Edges.

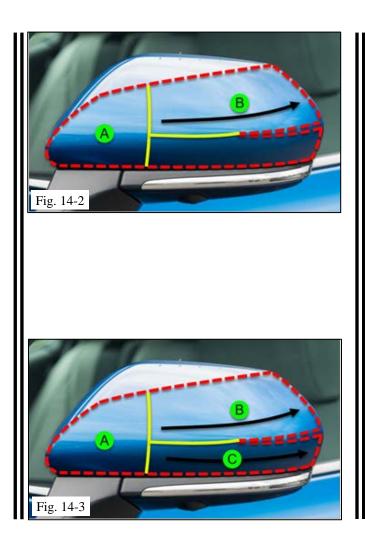
(a) This will be necessary after each individual piece. With the "T" shirt material wrapped around the hand, apply heat with the heat gun from 6 to 8 inches away from the vehicle panel. Angle the heat gun to heat the glue side of the material as opposed to the clear coat side. First, apply heat, then wipe the material edge down with the "T" shirt wrapped hand. The film will be very pliable so take care to not distort the film. This process should be applied to the entire outer edge of the piece to seal the piece completely.



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#### 14. Mirror Installation Procedure.

(a) Align the lower edge within the proper tolerance and the inner edge with the curve of the body line. Use the squeegee to apply the film so that it is secure. Use alcohol solution as needed to ensure placement is kept (Fig. 14-1).



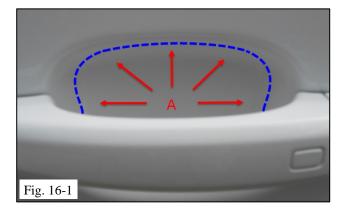
- (b) Apply a small amount of alcohol solution under the outer edge of this section. Grip the material with your fingertips at the outer lower corner and gently pull the film outward wrapping it around the curved surface to alleviate fingers. Wipe the film into place where the alcohol was applied. Use the upper body line as a guide for alignment. The top edge should land within 5 MM of the upper body line. Hold the tension of the stretch with one hand and use the squeegee in the other to push all the solution out securing the film in place (Fig. 14-2).
- (c) Apply your alcohol solution underneath the entire section. First secure the film with the squeegee at the inner most point of the relief cut. Next, Pull the material outward and wipe it into place. Be sure that the upper edge is not overlapping section B. Use the squeegee to remove all remaining solution and work down any fingers that remain (Fig. 14-3).
- (d) Check surface for bubbles or any other defects before continuing.
  - (e) The same sequence of steps will be used to apply the opposing side.

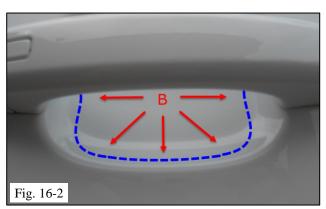
#### 15. Seal All the Edges.

(a) This will be necessary after each individual piece. With the "T" shirt material wrapped around the hand, apply heat with the heat gun from 6 to 8 inches away from the vehicle panel. Angle the heat gun to heat the glue side of the material as opposed to the clear coat side. First, apply heat, and then wipe the material edge down with the "T" shirt wrapped hand. The film will be very pliable so take care to not distort the film. This process should be applied to the entire outer edge of the piece to seal the piece completely.

# 16. Door Cup Installation Procedure.

- (a) Apply wetting agent to part and alcohol solution to the surface of the door. Place the film in the handle opening and center it using the top and bottom lip as a guide. Use your thumbs to gently wipe the center of the piece until it is tacked. Remove the remaining solution pushing it out gradually towards the edges working away from the center (Fig. 16-1).
- (b) Continue using your thumbs to remove the solution and work the piece down starting at the center gradually moving down and out towards the outside edges (Fig. 16-2).
- (c) Repeat steps A and B on all doors.
- (d) Check surface for bubbles or any other defects before continuing. The corners or skinnier portion of your application tool may be used to remove any stubborn bubbles that have been left behind.





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Procedure

# 17. Seal All of the Edges.

(a) This will be necessary after each individual piece. With the "T" shirt material wrapped around the hand, apply heat with the heat gun from 6 to 8 inches away from the vehicle panel. Angle the heat gun to heat the glue side of the material as opposed to the clear coat side. First, apply heat, and then wipe the material edge down with the "T" shirt wrapped hand. The film will be very pliable so take care to not distort the film. This process should be applied to the entire outer edge of the piece to seal the piece completely.

#### 18. Post-installation Instructions.

(a) Clean the surface of the vehicle as necessary.

#### 19. Removal Process.

- (b) Pick an edge corner of the material up. Grab enough material to allow a secure grasp with hand.
- (c) Pull material towards body at an angle (between 30° to 45°). Do not try to rip material off the surface, instead, stretch the material off the surface. By stretching the material, you will minimize the amount of adhesive left on the surface.
- (d) Clean adhesive left on the surface using a common adhesive remover.

TOYOTA AVALON/HV 2019 - PAINT PROTECTIVE FILM
Checklist - these points MUST be checked to ensure a quality installation.

Check:

Look For:

Check:	Look For:
Accessory Function Checks  Correct part number has been installed.  Proper equipment was used to install.  Check for film quality and proper installation	Verify part number on package.  Check for loose edges, bubbles, and or film damage.  Check for scratches, correct edge
Vehicle Function Checks	alignment, and or debris under film.