

Toyota Hydrobase Application

Basecoat and Fade-out process

1, CLEANING



After sanding the surface clean the fade-out area with **Toyota Hydro Cleaner**
Dry thoroughly.



2, SANDING



The leading edge of the fade-out zone can be sanded carefully with P1200-P1500.
Remove the gloss to obtain adhesion of the basecoat.



3, FADE-OUT PREP



Sand the remaining 80% of The part with a Grey-Pad or P3000.
Alternatively, sand damp with Trizact or similar abrasive.



4, RE-CLEANING



Re-clean with **Toyota Hydro Cleaner**
Dry thoroughly.
Remove surface dust from all areas of the vehicle.



5, MASKING

The vehicle can now be masked
And prepared for the spray booth.
Paper or plastic masking can Be utilised in accordance with Local regulations.



6, APPLICATION



After cleaning, blowing and surface wiping. Apply **Toyota Hydro Basecoat** to the primed or sanded areas in a "one-visit" application.



7, APPLICATION



Apply **Toyota Hydro Basecoat** to the leading edge of the part in an outward arcing motion.
Ensure sufficient coverage to fill sanding scratches.



8, APPLICATION



Add mixed **Hydro Fade-Out** To the remaining color & stir.
Apply to the edge of the color with an increasing distance to the surface in an arcing motion.



9, DRYING



Dry the **Toyota Hydro Basecoat** until matt.
The surface can be carefully Tack-wiped if necessary.



10, CLEAR COAT



Apply **Toyota HS Clear** or **Toyota HS Clear Fast** to The complete repair zone
Dry in accordance with the TDS.

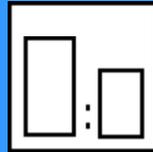


Toyota Hydro Basecoat & 2K HS Clears

Mixing and Application

TOYOTA HYDRO BASECOAT HYDRO THINNER

USE ON TOYOTA PRIMERS OEM PAINTWORK
Warranty Process



Add 5-10% Hydro Thinner



Ready to use @ 22-26 sec DIN4



Gravity Gun SATA WSB GTI-W



1 x light coat
1 x covering coat
1 x effect coat as a 1-visit process



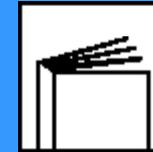
No flash off needed between coats



Flash off or blow until matt



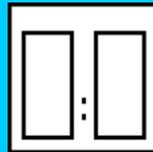
Overcoat with HS Clear or HS Clear Fast



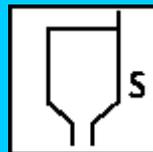
Refer to TDS and MSDS

TOYOTA HYDRO BASECOAT FADE-OUT

USE ON FADE OUT ZONES
Warranty Process



Mix 1:1 with Hydro Basecoat Colour (Thinned)



Ready to use @ 22-26 sec DIN4



Gravity Gun 1.3 - 1.4 mm



Apply 1 light coat on fade-out-zone @ 0.8 - 1.5 bar



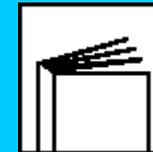
No flash off needed between coats



Flash off or blow Until matt



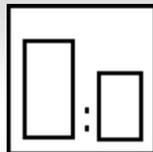
Overcoat with HS Clear or HS Clear Fast



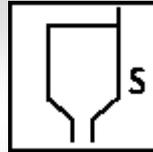
Refer to TDS and MSDS

TOYOTA HS CLEAR

USE ON HYDRO BASECOAT OLD PAINTWORK
Warranty Process



Mix 2:1 with 2K HS Hardener 2030 OR 2540



Ready to spray



Gravity Gun 1.3 - 1.4 mm



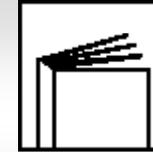
Apply 1 x grip-coat
1 x wet coat



No flash off 1 visit application



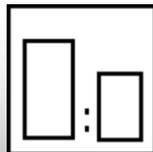
Dry for 30 40 mins @60°C



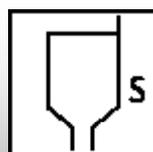
Refer to TDS and MSDS

TOYOTA HS CLEAR FAST

USE ON HYDRO BASECOAT OLD PAINTWORK
Warranty Process



Mix 2:1 with 2K HS Hardener 2030 or 2540



Ready to spray



Gravity Gun 1.3 - 1.4 mm



Apply 1 x Closed Coat
1 x wet coat



No flash off 1 visit application



Dry for 25-30 mins @60°C



Refer to TDS and MSDS

2K HS Clear & 2K HS Clear Fast can be made "Flexible" with 2K Additive and, "Satin" or "Matt" with 2K Matting Clear



Toyota Hydrobase Application

Basecoat and Fade-out process

1, INSPECTION

Check the part for damage or defects



2, CLEANING

As the part is NOT Pre-Primed clean with **Toyota Plastic Cleaner** to remove release agent Clean at least 2-3 times



3, De-Gassing

The raw part needs to be De-gassed or heated to 60°C for 60 mins. This process will drive oils, grease and wax to the surface ready for removal



4, RE-CLEANING

Re-clean with **Toyota Plastic Cleaner** and a grey Scuff pad . Dry thoroughly. position on a support stand



5, PRIMING

Prime with **Toyota Plastic Adhesion Promotor**. Allow to dry for 10 mins @ 20°C. Overcoat with **Toyota 2K Universal Primer with 15% 2K Plastic Additive** dry for 30 mins @60°C



6, SANDING

Sand the dried parts dry with P400-500 Take care not to sand through. Structure can be removed or minimised



7, FURTHER CLEANING

Blow and re-clean with **Toyota Hydro Cleaner** and position part on a support stand



8, COLOR APPLICATION

Apply **Toyota Hydro Basecoat** to the parts including inner edges Dry until matt



9, CLEAR COATING

Apply **Toyota 2K HS Clear Fast** containing **Toyota 2K Plastic Additive**. Dry for 30-40 mins @60°C



10, FITTING PARTS

Dried parts can be fitted after cooling. Do not pressure wash for x 6 weeks



Toyota Mixing and Tinting Colors

Color Adjustment

1, ESTIMATE

Identify and record the color of the vehicle at the time of estimate. Be sure to identify Pearl or Effect colors to be able the recovery of extra extra cost's



2, POLISHING

Polish and area adjacent to the repair zone with an abrasive polish to restore the original color of the vehicle



3, IDENTIFICATION

Identify the variant shade of the vehicle with the color chips and variant fan-deck. Always perform this check in Natural day-light



4, MIXING

Stir the Toyota Mixing System for 15 minutes. Retrieve the relevant color and mix according to the formula. mixing accurately is critical to the end result



5, COLOR TEST

Spray a color test card at the same pressure and distance as used for the vehicle until Covered. Apply Clear Coat and Dry. Check the color in daylight. If the color is not blend-able adjust it.



6, ADJUSTMENT

If you choose to adjust the original color shade use ONLY the mixing toners contained in the original formula to avoid color-change in artificial light



7, COLOR DIRECTION

Using the spray-out and the mixing toner guide identify the color direction.

Redder ?
Bluer ?
Lighter ?



8, TINTING

Keep a little of the original mix as a master sample. Always adjust on the Scale. Record the quantities used. wet samples can be compared to the first mix



9, RE-TESTING

When the wet sample looks close enough to blend spray adjusted samples as performed earlier. Check in daylight when dry



10, RECORD KEEPING

Color cards should be kept for future reference. It is good practice to produce a hand sprayed library of variant colors

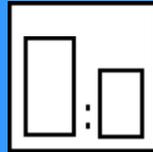


Toyota Hydro Basecoat & 2K HS Clears

Mixing and Application

TOYOTA HYDRO BASECOAT HYDRO THINNER

USE ON TOYOTA PRIMERS OEM PAINTWORK
Warranty Process



Add 5-10% Hydro Thinner



Ready to use @ 22-26 sec DIN4



Gravity Gun SATA WSB GTI-W



1 x light coat
1 x covering coat
1 x effect coat as a 1-visit process



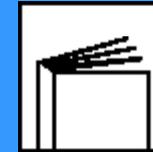
No flash off needed between coats



Flash off or blow until matt



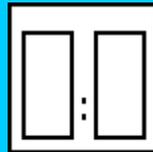
Overcoat with HS Clear or HS Clear Fast



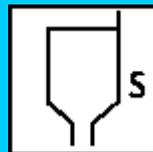
Refer to TDS and MSDS

TOYOTA HYDRO BASECOAT FADE-OUT

USE ON FADE OUT ZONES
Warranty Process



Mix 1:1 with Hydro Basecoat Colour (Thinned)



Ready to use @ 22-26 sec DIN4



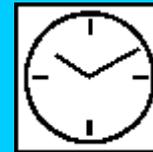
Gravity Gun 1.3 - 1.4 mm



Apply 1 light coat on fade-out-zone @ 0.8 - 1.5 bar



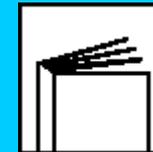
No flash off needed between coats



Flash off or blow until matt



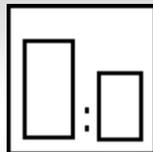
Overcoat with HS Clear or HS Clear Fast



Refer to TDS and MSDS

TOYOTA HS CLEAR

USE ON HYDRO BASECOAT OLD PAINTWORK
Warranty Process



Mix 2:1 with 2K HS Hardener 2030 OR 2540



Ready to spray



Gravity Gun 1.3 - 1.4 mm



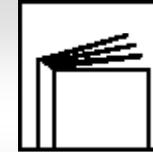
Apply 1 x grip-coat
1 x wet coat



No flash off 1 visit application



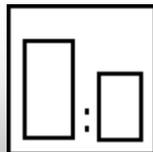
Dry for 30 40 mins @60°C



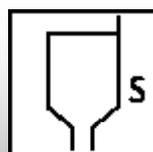
Refer to TDS and MSDS

TOYOTA HS CLEAR FAST

USE ON HYDRO BASECOAT OLD PAINTWORK
Warranty Process



Mix 2:1 with 2K HS Hardener 2030 or 2540



Ready to spray



Gravity Gun 1.3 - 1.4 mm



Apply 1 x Closed Coat
1 x wet coat



No flash off 1 visit application



Dry for 25-30 mins @60°C



Refer to TDS and MSDS

2K HS Clear & 2K HS Clear Fast can be made "Flexible" with 2K Additive and, "Satin" or "Matt" with 2K Matting Clear



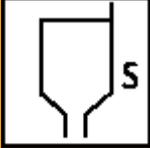
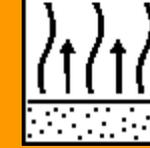
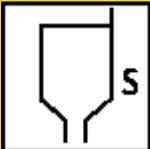
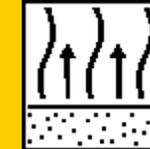
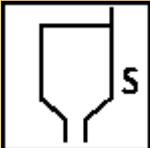
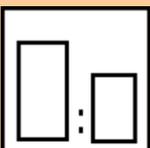
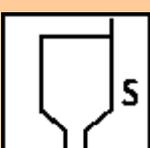
Toyota Motor Europe

mick.monaghan@deu.dupont.com



Toyota 1K & 2K Primers / Fillers

Mixing and Application

| | | | | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <p>TOYOTA METAL PRIMER + ACTIVATOR</p> <p>USE ON STEEL ALUMINIUM E-COAT</p> <p><i>Warranty Process</i></p> |  <p>Mix 1:1 with Primer Activator</p> |  <p>Ready to use</p> |  <p>Gravity Gun 1.3 - 1.5 mm</p> |  <p>Apply 1-2 Coats</p> |  <p>Flash off for 5 mins between coats</p> |  <p>Flash off for 20-30 min @20°C</p> |  <p>Overcoat with Multi Surfacer or HS Repair Filler</p> |  <p>Refer to TDS and MSDS</p> |
| <p>TOYOTA MULTI SURFACER</p> <p>USE ON NEW PARTS SANDED OR WET-ON-WET</p> <p><i>Warranty Process</i></p> |  <p>Mix 3:1 with 2K HS Hardener 1525 or 2030</p> |  <p>Add 20% 2K Thinner</p> |  <p>Gravity Gun 1.3 - 1.4 mm</p> |  <p>Apply 1 light coat 1 closed coat</p> |  <p>No flash off needed between coats</p> |  <p>Flash off for 20-30 min @20°C</p> |  <p>Overcoat with Hydro Basecoat or 2K HS Topcoat</p> |  <p>Refer to TDS and MSDS</p> |
| <p>TOYOTA HS REPAIR FILLER Light Grey & Dark Grey</p> <p>USE ON REPAIR ZONES OLD PAINTWORK</p> <p><i>Warranty Process</i></p> |  <p>Mix 4:1 with 2K HS Hardener 1525 or 2030</p> |  <p>Add 0-10% (max) 2K Thinner</p> |  <p>Gravity Gun 1.5 - 1.8 mm</p> |  <p>Apply 2-4 Coats</p> |  <p>Flash off for 5 mins between coats - 10 min before bake</p> |  <p>Dry for 30 mins @60°C</p> |  <p>Sand then overcoat with Hydro Basecoat or 2K HS Topcoat</p> |  <p>Refer to TDS and MSDS</p> |
| <p>TOYOTA 1K PRIMER FILLER</p> <p>USE ON RUB-THROUGHS</p> |  <p>Mix with 50% 2K Thinner</p> |  <p>Ready to spray @ 18-20 sec DIN4</p> |  <p>Gravity Gun 1.5 - 1.7 mm</p> |  <p>Apply 1-2 Coats</p> |  <p>Flash off for 5 mins between coats</p> |  <p>Dry for 30 mins @20°C</p> |  <p>Overcoat with Hydro Basecoat or 2K HS Topcoat</p> |  <p>Refer to TDS and MSDS</p> |

2K Multi Surfacer and 2K HS Repair Filler can be Tinted with up-to 10% 2K HS Colour



Toyota Motor Europe

mick.monaghan@deu.dupont.com



Toyota Plastic Painting Process

Pre-Painted damaged parts (cosmetic repair)

1, INSPECTION

Identify if the part is structurally damaged to assess the repair process. Minor non-structurally damaged scuffs can be processed as follows



2, CLEANING

As the part is Pre-Painted, clean with **Toyota Panel Degreaser** to remove road grime and waxes or tar spots



3, SANDING

Sand the area dry with P240 Remove all traces of "plastic-Burs" or excess plastic from Around the scuffed area. Re-Clean with **Toyota Plastic Cleaner**



4, ADHESION-STOPPER

Apply **Toyota Adhesion Promotor** and dry for 10-20 mins Mix and apply **Toyota Multi Surface Stopper** to fill the scuffs Allow to dry for 20-30 mins



5, SANDING

Sand the dried Stopper With P240-320 and abrade Surrounding areas with a red Scuff pad.



6, CLEANING

Clean the exposed plastic with **Toyota Plastic Cleaner** Dry thoroughly, blow and tack-wipe



7, PRIMING

Apply **Toyota Plastic Adhesion Promotor** to the Bare plastic area. Allow to dry for 10-mins @20°C



8, PRIMER FILLER

Add 15% **Toyota Plastic Additive** to **Toyota 2K HS Repair Filler**. Then mix 2:1 with **Toyota 2K HS Hardener** and thin as required. Apply 2-3 coats to the repair zone



9, DRYING

Dry for 30-40 min @60°C Or air dry overnight



10, FURTHER WORK

After drying the 2K Filler Can be sanded ready for **Toyota Hydro Basecoat** and **Toyota 2K HS Clear** Containing **Toyota 2K Plastic Additive**



More information can be found in the Technical Data Sheets



Toyota Plastic Painting Process

Original Pre-Primed Plastic Parts

1, INSPECTION

Check the part for damage or defects



2, CLEANING

As the part is Pre-Primed clean with **Toyota Hydro-Cleaner**



3, SANDING

Abrade the part with A grey-scuff pad or Fine sand with P500 dry



4, RE-CLEANING

Re-clean with **Toyota Hydro Cleaner** and position on a support stand



5, PRIMING

Prime with **Toyota 2K Multi Surfacer** mixed With 15% **Toyota 2K Plastic Additive**
Dry parts 30 min @60°C



6, FURTHER SANDING

Sand the dried parts with P400-500 dry. Take care not to sand through



7, FURTHER CLEANING

Blow and re-clean with **Toyota Hydro Cleaner** and position part on a support stand



8, COLOR APPLICATION

Apply **Toyota Hydro Basecoat** to the parts including inner edges
Dry until matt



9, CLEAR COATING

Apply **Toyota 2K HS Clear Fast** containing **Toyota 2K Plastic Additive**. Dry for 30-40 mins @60°C



10, FITTING PARTS

Dried parts can be fitted after cooling. Do not pressure wash for x 6 weeks



More information can be found in the Technical Data Sheets



Toyota Plastic Painting Process

Un-Primed Plastic Parts / smooth or structured

1, INSPECTION

Check the part for damage or defects



2, CLEANING

As the part is NOT Pre-Primed clean with **Toyota Plastic Cleaner** to remove release agent Clean at least 2-3 times



3, De-Gassing

The raw part needs to be De-gassed or heated to 60°C for 60 mins. This process will drive oils, grease and wax to the surface ready for removal



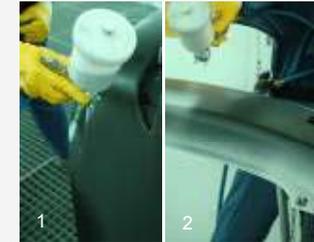
4, RE-CLEANING

Re-clean with **Toyota Plastic Cleaner** and a grey Scuff pad . Dry thoroughly. position on a support stand



5, PRIMING

Prime with **Toyota Plastic Adhesion Promotor**. Allow to dry for 10 mins @ 20°C. Overcoat with **Toyota 2K Universal Primer** with 15% **2K Plastic Additive** dry for 30 mins @60°C



6, SANDING

Sand the dried parts dry with P400-500 Take care not to sand through. Structure can be removed or minimised



7, FURTHER CLEANING

Blow and re-clean with **Toyota Hydro Cleaner** and position part on a support stand



8, COLOR APPLICATION

Apply **Toyota Hydro Basecoat** to the parts including inner edges Dry until matt



9, CLEAR COATING

Apply **Toyota 2K HS Clear Fast** containing **Toyota 2K Plastic Additive**. Dry for 30-40 mins @60°C



10, FITTING PARTS

Dried parts can be fitted after cooling. Do not pressure wash for x 6 weeks



More information can be found in the Technical Data Sheets



Toyota Safety Process

Personal Protective Equipment

| Surface Cleaning | Sanding Substrates | Stopper Application | Mixing | Application | Polishing |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Hazard | Hazard | Hazard | Hazard | Hazard | Hazard |
| Solvent vapour | Dust and debris | Styrene & Peroxide | Solvent vapour | Isocyanate & vapour | Various chemicals |
| Risk | Risk | Risk | Risk | Risk | Risk |
| Inhalation Skin contact Splashes Eye contact | Inhalation Skin contact Eye contact | Skin burns Inhalation of vapour Eye irritation | Inhalation Skin contact Splashes Eye contact | Inhalation Skin contact Splashes Eye contact | Inhalation Skin contact Splashes Eye contact |
| Personal Precautions | Personal Precautions | Personal Precautions | Personal Precautions | Personal Precautions | Personal Precautions |
| Solvent vapour-respirator Solvent resistant-gloves Goggles or visor | Particulate respirator Gloves Goggles or visor Ear defenders/plugs | Solvent vapour-respirator Solvent resistant-gloves Goggles or visor | Solvent vapour-respirator Solvent resistant-gloves Goggles or visor | Air-fed respirator Solvent resistant-gloves Spray-suit | Solvent vapour-respirator Solvent resistant-gloves Goggles or visor Ear defenders/plugs |



Toyota Surface Preparation

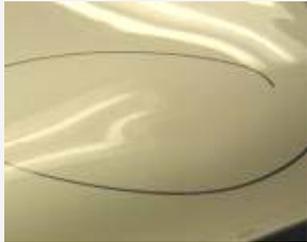
Damaged area Preparation

2K HS Repair Filler

1, INSPECTION



Clean the part with **Toyota Panel Degreaser**
Check for damage and stone chips.
Highlight damaged zone with a non-silicone marker pen



2, SANDING



Mask to minimise dirt & dust.
The cleaned, damaged area is sanded with P60 or a paint stripping disc



3, DENT REMOVAL

Remove dents where possible
Inaccessible areas may need to be "pulled-out" such as this case.



4, RESHAPING



High spots should be removed after pulling and Shaping
The area is then sanded with P80 and edges are feathered



5, STOPPERING



Mix **Toyota Multi Surface Stopper** with 2-3% **Stopper Hardener**. Mix well and apply to the damaged area.
Avoid layers that exceed 1000 microns



6, SANDING



After drying for 20 minutes @20°C the Stopper can be sanded with P80-180-220. Shape with a block and feather paint edges as required



7, FURTHER CLEANING



Remove surface dust and protective masking. Re-clean with **Toyota Panel Degreaser** on a lint-free cloth



8, METAL PRIMING



Bare metal must be primed with **Toyota Metal Primer** mixed 1:1 with **Metal Primer Activator**. Apply 1-2 light coats and allow to dry for 30 minutes @ 20°C



9, PRIMER FILLER



Mix **Toyota 2K HS Repair Filler** 4:1 with **2K HS Hardener 1020** +10% **2K Thinner**. Apply 2-3 coats and dry for 30 mins @60°C



10, PRIMER FILLER



Toyota 2K HS Repair Filler Can be tinted with up to 15% **2K HS Mixing Color** and then Mixed 4:1 with **2K HS Hardener** and 10% **2K Thinner**



More information can be found in the Technical Data Sheets



Toyota Surface Preparation

Original replacement part preparation 2K HS Multi Surfacer

1, INSPECTION



Check the part for damage or defects.
Clean the part with **Toyota Panel Degreaser** on A lint-free cloth such as DuPont Sontara® wipes



2, SANDING



Perfect parts need be only sanded with a scuff-pad.
This part has been damaged in transit and needs sanding with P320. Try not to remove the e-coat



3, RE-CLEANING



After sanding secure the part On a stand and position in the Spraybooth. Clean with **Toyota Panel Degreaser** on A lint-free cloth such as DuPont Sontara® wipes



4, METAL PRIMING



Bare metal must be primed with **Toyota Metal Primer** mixed 1:1 with **Metal Primer Activator**. Apply 1-2 light coats and allow to dry for 30 minutes @ 20°C



5, SURFACER



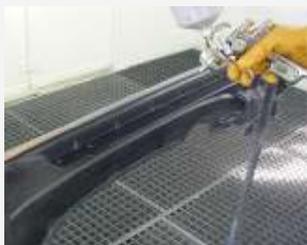
Prime with **Toyota Multi Surfacer** mixed 3:1 + 15% **2K Thinner**
Apply 2-3 coats as a sanding surfacer to all edges.
Allow to flash-off for 10-20 minutes @ 20°C



6, INNER EDGES



The inner edges are colored With **Toyota Hydro Basecoat**
And over coated with **Toyota HS Clear Fast**
Dry @ 60°C for 30 minutes



7, SANDING



After drying the parts are re-fitted and can be guide coated and sanded with P400-500 dry.
The adjacent door is also prepared for blending



8, PREPARATION



After sanding & cleaning mask the vehicle and position in the spraybooth. Clean with **Toyota Hydro Cleaner** on on A lint-free cloth such as DuPont Sontara® wipes



9, BASECOAT



Mix **Toyota Hydro Basecoat** With 10% **Hydro Thinner**
Apply ½ Coat followed by 1 covering coat. If required apply a lighter control coat for appearance. Dry matt



10, CLEAR COAT



After drying the Basecoat Mix **Toyota HS Clear** 2:1 With **2K HS Hardener** 20-30
Apply ½ coat and a full coat
In a one-visit application
Dry 30-40 mins @60°C



Note, **Toyota HS Multi Surfacer** can be used as a wet-on-wet primer or as Sanding Surfacer.
In addition, the Surfacer can be "colored" if required with up to 15% **Toyota 2K HS Mixing Colors**

