# **SECTION: 501-25C Body Repairs - Plastic Repairs**

**VEHICLE APPLICATION**: 2008.0 Falcon

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**DESCRIPTION AND OPERATION** 

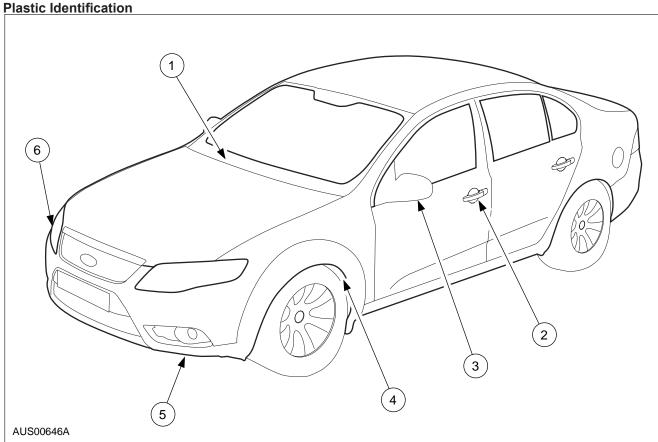
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#### **DESCRIPTION AND OPERATION**

#### **Plastic Repairs**

#### Diantia Idantification



Item	Description
1	Cowl Grille PP
2	Door Handle PA66
3	Mirror ABS/PC
4	Splash shield PP
5	Bumper cover PP
6	Headlight lens PC (coated)

NOTE: All plastic parts have material idendification codes (Recycling Codes) according to SAE J1344.

## PC (Polycarbonate)

A stiff hard material that is not readily cut, sinks in water, difficult to ignite but burns with an orange spluttering flame and yellowish sooty smoke, and sweetish smell when extinguished.

In the automotive trade, Polycarbonate is blended with other thermoplastics to produce alloys.

#### PP (Polypropylene)

Stiff, hard, easy to cut, has waxy almost greasy feel, floats in water, burns with a yellow flame with a trace of blue at the base of the flame, molten droplets, little smoke and smells of burning oil when extinguished.

Automotive uses include heater assemblies, batteries, fan shrouds, headlight bodies and kick panels.

#### **ABS (Acrylonitrile Butadiene Styrene)**

This material is stiff, hard, easily cut with a sharp knife, sinks in water and burns readily with an orange/ yellow flame (similar to an acetylene flame) with black smoke and soot flakes.

Widely used in the motor car for radiator grilles, tail light bodies, interior and exterior trim panels.

Version:2008 Falcon Workshop Manual



# **Plastic Bumper Repair**

#### **Polypropylene Bumpers**

- Cut the rough edges around the flaw with a knife to make it smooth. Sand the area with a sander to make an angle of about 45 degrees.
  - CAUTION: Disconnect the battery ground cable before using any electric welding equipment.
- Weld damaged area. For service to a cracked area, melt the crack together using an Airless Plastic Welder. For repair of a hole, degrease the area and the reverse side of the damaged area. Install aluminium tape on reverse side of, damaged area.
- 3. Melt the polypropylene welding rod with the welder and deposit it in the cracked area. Take care not to excessively melt the welding rod. If the part is welded with the welding rod melted like jelly, the welding strength will be lowered. Operate a heat gun 12-51 mm away from the part that will be welded. Do not move the welded rod until the welded part cools.
  - NOTE: Do not sand part continuously.
- Sand the surface of the polypropylene little by little, since it is easily melted even by the abrasion heat. If melted, remove the melted area. Sand the areas to which service agent will be applied.
- Apply polypropylene primer uniformly to an area larger than the serviced area with a brush. It will take about 10 minutes to dry at 20 °C.
   NOTE: When mixing the main and stiffening agents, be careful not to allow bubbles to form.
- 6. Mix the main agent and the stiffening agent in a ratio of one to one. Apply the mixed service agent to the damaged area. Since the servicing agent hardens fast (about five minutes), proceed with the work immediately after mixing the agents. It will take about 30 minutes to dry at 20°C before it can be sanded.

NOTE: If excessive force is applied to the area when sanding, the surface will not become smooth.

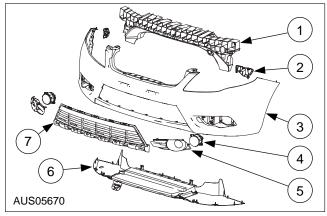
- 7. Sand the area with # 180- # 240 sandpaper. If there is fuzz around the repaired area, melt it by heating it slightly with a heat gun.
- Degrease the painted surface.
  NOTE: Polypropylene primer will dissolve, even after drying, if it is wiped with solvent. Use only water to clean.
- 9. Dry the part.
- 10. Add the softener to the urethane primer surfacer and spray it on the service area.
- 11. Air dry at 20°C for 8 hours. Force dry at 60°C for 1 hour.
- 12. Lightly sand the area on which the primer surfacer is sprayed and the complete surface of the bumper with #400-#600 sandpaper. Do not expose the surface of the polypropylene. (Wet sanding or dry sanding is acceptable).
- Wipe the complete surface of the bumper with degreasing agent. Quickly wipe the surface with a clean rag to degrease it.
- 14. Apply a matching coat of paint to the polypropylene bumper as described in Section 501-32.

Refer to Section <u>501-32</u> for refinishing techniques for other plastic components.

NOTE: The paint for servicing a polypropylene bumper adheres poorly to a urethane bumper. Therefore, be sure to use only urethane primer for a urethane bumper and polypropylene primer for a polypropylene bumper.

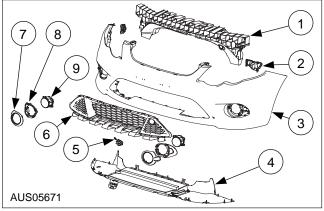


## Front Bumper XLS Ute



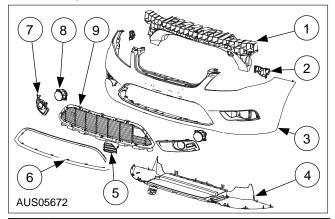
Item	Description
1	Front bumper absorber
2	Front bumper bracket
3	Front bumper fascia
4	Foglamp
5	Foglamp deflector
6	Lower deflector
5	Lower bumper grille

## **Front Bumper XR**



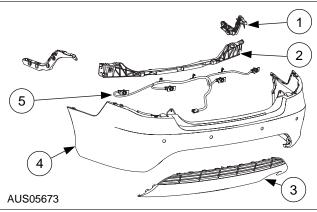
Item	Description
1	Front bumper absorber
2	Front bumper bracket
3	Front bumper fascia
4	Lower air deflector
5	Tow eye cover
6	Lower bumper grille
7	Fog lamp surround
8	Fog lamp grille
9	Fog lamp

## Front Bumper G6



Item	Description
1	Front bumper absorber
2	Front bumper bracket
3	Front bumper fascia
4	Lower air deflector
5	Tow eye cover
6	Lower grille surround
7	Fog lamp surround
8	Fog lamp
9	Lower bumper grille

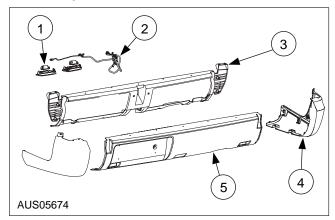
## Rear Bumper Sedan



Item	Description
1	Side bracket
2	Rear bracket
3	Rear skid plate
4	Rear facia
5	Sonar sensors and tow bar loom



# **Rear Bumper Ute**



Item	Description
1	Licence plate light and towbar loom
2	Licence plate lamp
3	Bumper reinforcement
4	Rear ute side panel
5	Rear ute fascia

