Gluing plastics:

Best practice: clean with rubbing alcohol, scuff surface with sandpaper

Read the label for recommended uses!

#2,4 and 5 (polyolefins) are harder to glue - don't assume produce marked for "plastic" will work. Some must be welded.

#6 is generally easier commodity plastic for gluing - plastic cement OK, loctite epoxy plastic binder

#3 can be bonded with common pvc solvent cement

ABS can be repaired with

Acrylic Cement should be left to evaporate when bonding acrylic panels

In most cases:

Decent: Cyanoacrylate (super glue)

Better: Plastic model glue

Best: Scotch weld dp8010 or dp8005 (Requires 3m applicator)

Some plastics can be re-shaped by immersion in near boiling water

Plastic Welding:

Preferred method for repairing Polyolefins - #2, 4, and 5 Common among sprayer tanks, small engine fuel tanks, water storage, 55 gallon drums, Canoes and Kayaks

Hot air gun technique - Challenging, but with professional results 'Soldering Iron' technique - Easier, more challenging to make look good UV damaged plastics may be impossible to weld

UV protection products are available: Krylon plastic paints, ScotchGaurd water & sun shield

Identifying plastics:

http://www.appropedia.org/Plastics recovery manual 2

Plastic repair guides:

https://www.wikihow.com/Glue-Plastic

https://makezine.com/2017/02/16/plastic-repair/