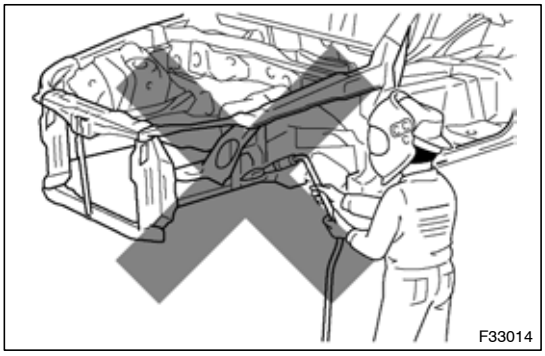
2. PRECAUTIONS WHEN REPAIRING BODY FRAME PARTS (INCLUDING CRUSH BOX)

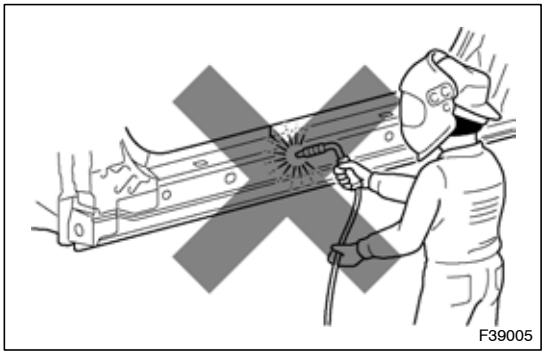


(a) PROHIBITION OF HEAT REPAIR FOR BODY FRAME PARTS

(1) Rustproof high strength steel sheets are used for the body frame. Therefore, if these parts are heat repaired using an acetylene torch or equivalent, the crystalline structure changes, causing the strength of the steel sheets to decrease. Also, the zinc coating which is used to protect the body from rust will be damaged. This causes the surface of the steel sheets to become oxidized, which reduces their ability to resist rust.

(b) NOTES ON ULTRA HIGH STRENGTH STEEL PANEL REPAIR

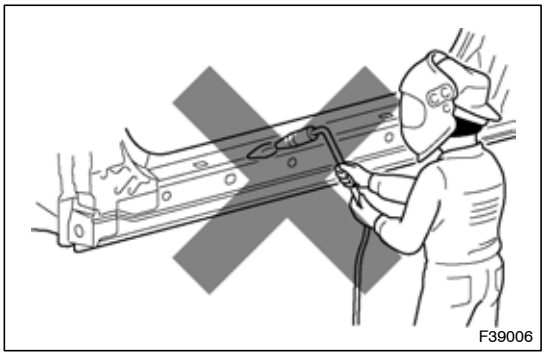
(1) Make sure that the frame aligning machine does not affect undamaged areas when aligning the frame.



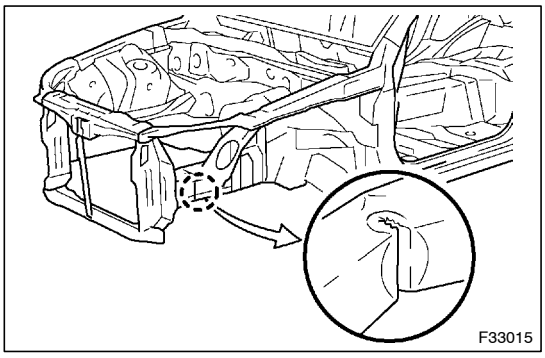
(2) Do not butt weld because the heat decreases the strength of the steel.

(3) Use a spot cutter suitable for high strength steel when removing spot welds. The cutter should be able to cut welding nuggets smoothly.

(4) Always follow the welding instructions when welding. (See the IN-4)



(5) Do not heat the panel when repairing.

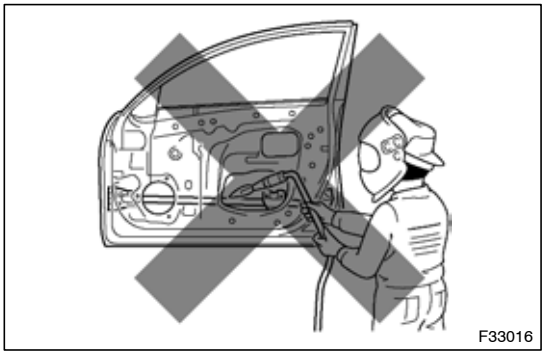


(c) WHEN TO REPLACE FRAME PARTS

NOTICE:
Replace the sections of the frame where kinks have occurred.

HINT:
What is kink?

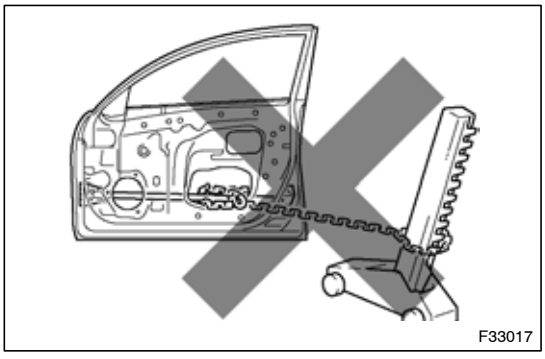
A deformation on a steel sheet that cannot be returned to its original shape by pulling or hammering due to the deformation angle being sharp.

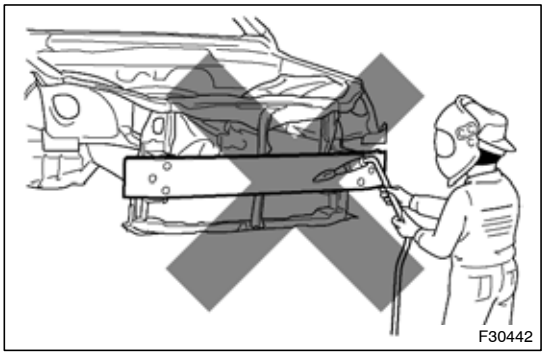


(d) REPAIR OF DOOR SIDE IMPACT BEAM IS PROHIBITED

(1) The impact beam is designed so that it performs at 100% in its original shape.
However, if the impact beam is repaired, its performance may not be the same as before the accident.

PARTS WHICH ARE PROHIBITED TO BE REPAIRED:
Door side impact beam





(e) REPAIR OF BUMPER REINFORCEMENT IS PROHIBITED

(1) The bumper reinforcement is designed so that it performs at 100% in its original shape.
However, if the bumper reinforcement is repaired, its performance may not be the same as before the accident.

PARTS WHICH ARE PROHIBITED TO BE REPAIRED:
Bumper reinforcement