

Technical Service Information



TSI-03-01-01R

This TSI replaces 03-01-01

Date: November, 2003

Subject File: FRAME

Subject: Frame Reinforcements

Model: 3400

Model: 3600

Model: 3800

Model: 4600

Model: 4700

Model: 4800

Model: 4900

DESCRIPTION

This TSI applies to S-Series Medium/Bus Models and QSP Medium/Bus Models.

For repairing vehicle frames that have a crack in the engine compartment (shock mounting bracket area) or at the body mount there are now two different style frame reinforcements available. For repairing vehicles with cracks in the frame rail in the Engine Compartment (Figure 1), you should use the below listed Local Reinforcements. For repairing vehicles that have a crack at the body mount area (Figure 2) you should use the below listed Frame Reinforcements.

PARTS INFORMATION

- Parts Information For Local Reinforcement at the Shock Mounts in the Engine Compartment

Table 1 S-Series Through 1954s

Part Number	Part Description	Quantity
1684350C1	Local Reinforcement, Left Side	1
1684351C1	Local Reinforcement, Right Side	1

PARTS INFORMATION (CONT.)

Table 2 3400, 3600, 3800, 4600, 4700, 4800, 4900 Built Before September, 1993

Part Number	Part Description	Quantity
1675873C2	Local Reinforcement, Left Side	1
1675874C2	Local Reinforcement, Right Side	1

Table 3 3400, 3600, 3800, 4600, 4700, 4800, 4900 Built September, 1993 and Later

Part Number	Part Description	Quantity
2041713C2	Local Reinforcement, Left Side	1
2041714C2	Local Reinforcement, Right Side	1

- Parts Information For Frame Reinforcement at the Body Mounts

Table 4 3600, 3800, Built September, 1993 with I-6 Engines and February 1994 with V-8 Engines and Later

Part Number	Part Description	Quantity
3539063C2	Frame Reinforcement, Left Side	1
3539064C2	Frame Reinforcement, Right Side	1

SERVICE PROCEDURE

It is not mandatory for either of the frame reinforcements to be installed. They should only be installed if there are cracks by the front shock mount or in the case of the bus cowl, the cowl mount or at the front body outrigger. It is important to stop drill and weld the crack prior to installing the frame reinforcement. To properly weld the frame refer to the procedure in S01001v Service Manual.

Use existing frame rail holes where available and drill others as required using the reinforcement as a template. For the frame reinforcement for the body mount area you will need to drill the holes in the appropriate location for the body outriggers.

It is important to use grade 8 flange head frame bolts and the bolts should be tightened to the proper torque.

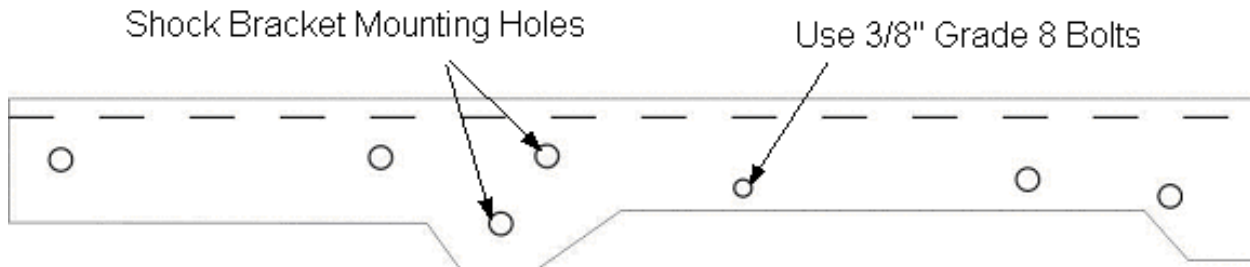


Figure 1 Local Reinforcement — Shock Area

Use 1/2 inch flange head grade 8 bolts in all holes except where otherwise indicated. Tighten 1/2 inch bolts to 110 to 120 lbf-ft. (149 to 162 Nm). Tighten 3/8 inch bolts to 34 to 38 lbf-ft. (46 to 51 Nm).

SERVICE PROCEDURE (CONT.)

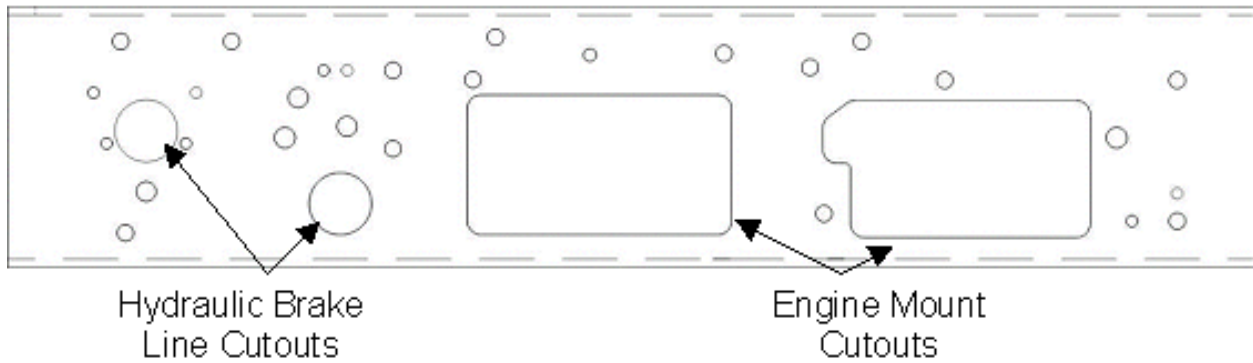


Figure 2 Frame Reinforcement — Body Mount Area

Use 1/2 inch flange head grade 8 bolts in all holes, the only exception may be the body's outrigger bracket which should be replaced with the same grade and diameter bolts (longer for increased thickness). Tighten 1/2 inch bolts to 110 to 120 lbf-ft. (149 to 162 Nm). Tighten 3/8 inch bolts to 34 to 38 lbf-ft. (46 to 51 Nm).