Reliability Driven®

Service Bulletin No. 446

MODEL	TYPE	SECTION/GROUP	DATE
J4500	Field Change Program	3-Body	June 14, 2017

SUBJECT

A/C COMPRESSOR SUPPORT TUBE

CONDITIONS

Customer Complaint:

Motor Coach Industries ("MCI") has become aware that the J4500 model coaches listed below may exhibit signs of premature wear or cracks on the A/C compressor support tube.

In the event of A/C compressor support tube failure, the drive belt for the A/C compressor may fail or slip off the pulley resulting in loss of function of the air conditioning.

Cause:

Belt loading on the idler pulley transferring to the support tube.

Corrective Action:

As a result, MCI strongly urges owners of the MY 2011, MY 2012, MY 2013, MY 2014, MY 2015, MY2016 and MY2017 J4500 model coaches listed in this bulletin to implement the steps in this procedure as soon as possible

65758 to 68080				

NOTICE

Upon visible inspection, in the event that the tube assembly is intact (no damage or cracks) utilize retrofit kit 26-03-0111. The support plates within the retrofit kit 26-03-0111 will not be required and are to be discarded.

Upon visible inspection, in the event that the tube assembly only exhibits surface cracks, utilize retrofit kit 26-03-0111.

Upon visible inspection, in the event that the tube assembly exhibits cracks that have completely propagated through the tube, utilize retrofit kit 26-03-0110.

Parts

Qty.	New P/N	Description
1	26-03-0110	Kit, Idle Bracket w/ A/C Support Tube
		Kit Contents are:
1	03-59-4739	Tube Assembly, Compressor Mount Bracket
1	08-27-1326	Angle, Idler Pulley Bracket
1	08-27-1327	Bracket, Snubber
2	19-01-1526	Capscrew, 1/2-13 x 3.0
4	19-01-1529	Capscrew, 1/2-13 x 2.5
8	19-01-1532	Capscrew, 5/16-18 x 0.75
2	19-01-1570	Capscrew, Flanged, 3/8-16 x 1.0, Gr. 8
2	19-01-1577	Capscrew, Hex. Hd, Flange, 1/2-13 x 1.25
8	19-03-0497	Nut, Flg. 1/2-13
8	19-03-0498	Nut, Flanged, Lock, 5/16-18
2	19-03-0535	Locknut, Flanged, 3/8-16, UNC, Gr. 8
3	08-27-1324	Shim, Idler Pulley Bracket
2	19-01-1736	Capscrew, 3/8-16 x 1.50

Qty.	New P/N	Description
1	26-03-0111	Kit, Idle Bracket w/ A/C Support Plate
		Kit Contents are:
2	03-59-4689	Plate, Support
1	08-27-1326	Angle, Idler Pulley Bracket
1	08-27-1327	Bracket, Snubber
2	19-01-1526	Capscrew, 1/2-13 x 3.0
4	19-01-1529	Capscrew, 1/2-13 x 2.5
8	19-01-1532	Capscrew, 5/16-18 x 0.75
2	19-01-1570	Capscrew, Flanged, 3/8-16 x 1.0, Gr. 8
2	19-01-1577	Capscrew, Hex. Hd, Flange, 1/2-13 x 1.25
8	19-03-0497	Nut, Flg. 1/2-13
8	19-03-0498	Nut, Flanged, Lock, 5/16-18
2	19-03-0535	Locknut, Flanged, 3/8-16, UNC, Gr. 8
3	08-27-1324	Shim, Idler Pulley Bracket
2	19-01-1736	Capscrew, 3/8-16 x 1.50

Service Procedure:

WARNING

Read this entire procedure before beginning work.

Use Safe Shop Practices At All Times.

WARNING

To avoid personal injury, never enter or perform work in the engine compartment prior to positioning the ENGINE RUN and ENGINE START switches on the engine compartment remote control box to the OFF position. Allow enough time for components to cool down prior to working in the engine compartment.

CAUTION

The following information must be read before beginning any welding. The prohibitions and requirements must be followed to prevent personal injury and damage to electrical components. Also follow any welding instructions and cautions associated with the specific component being repaired.

Welding may only be performed by an experienced and qualified person. All welding must conform to AWS D1.1 Structural Welding Code - Steel. All applicable instructions and prohibitions must be followed.

Position ground contacts and barriers as close as possible to the weld area to protect components (wiring, brake lines, hydraulic lines, etc.) from heat, contact by weld splatter, and arcing.

NOTICE

The weld disconnect procedure listed on Page 38 of this Service Bulletin must be performed prior to welding on the coach.

In the event that welding needs to be performed on the coach, the secondary (lower) lavatory tank must be drained and empty to perform the retrofit.

1. Turn the main battery disconnect to the OFF position.
2. Chock both sides of the tires.
3. Open the engine compartment door.

4. Visually inspect both faces of the A/C compressor support tube for stress damage (refer to Figures 1 and 2). Carefully inspect the area of the idler pulley mounting bracket.

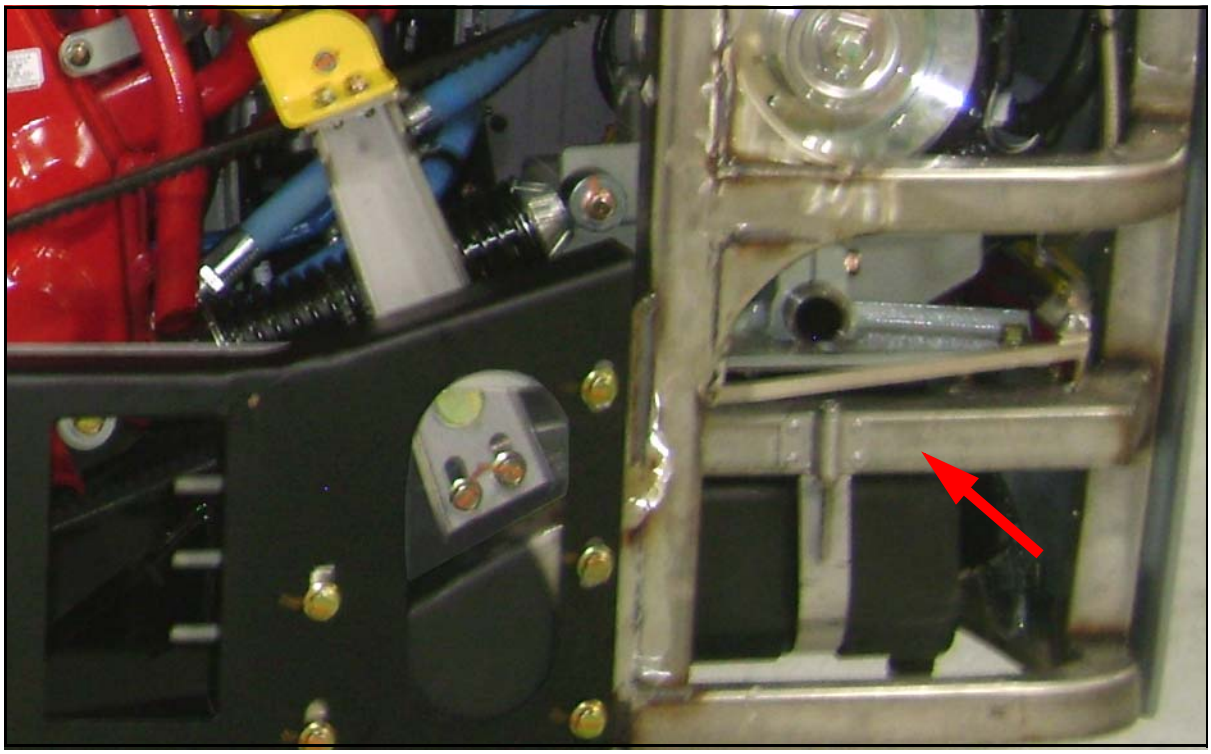

Figure 1. Reference view of front face of A/C compressor support tube.

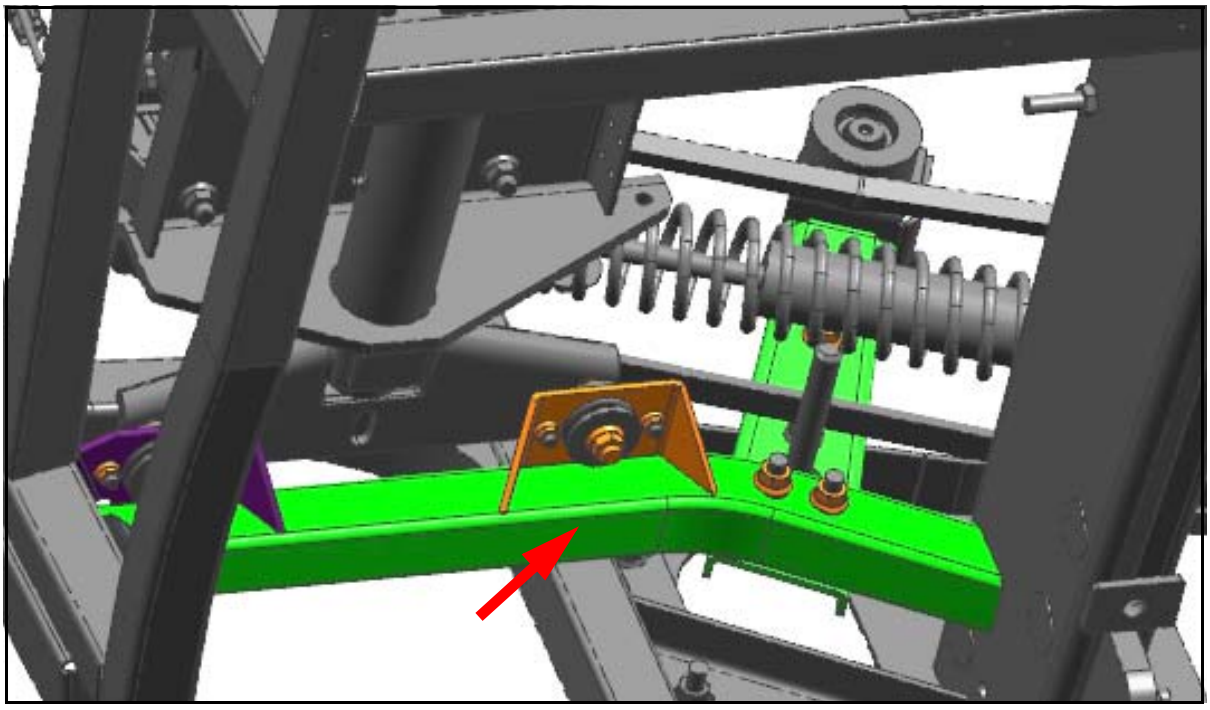

Figure 2. Reference view of rear face of A/C compressor support tube.

NOTICE

If no cracks are found on the A/C compressor support tube upon visible inspection, proceed to Page 6 / Step 5, using retrofit kit 26-03-0111.

If a crack is found on the A/C compressor support tube upon visible inspection, proceed to Page 9 / Step 14, using retrofit kit 26-03-0111.

If the A/C compressor support tube assembly exhibits cracks that have completely propagated through the tube, proceed to Page 23 / Step 54, using retrofit kit 26-03-0110.

5. Locate the existing snubber bracket assembly shown in Figure 3. Remove and discard the existing snubber bracket and mounting hardware. Retain the idler pulley to be re-installed at a later step in this procedure.
6. Using a 17/32 inch drill bit and a drill, drill a mounting hole in the tie bar plate per the dimensions shown in Figure 3.

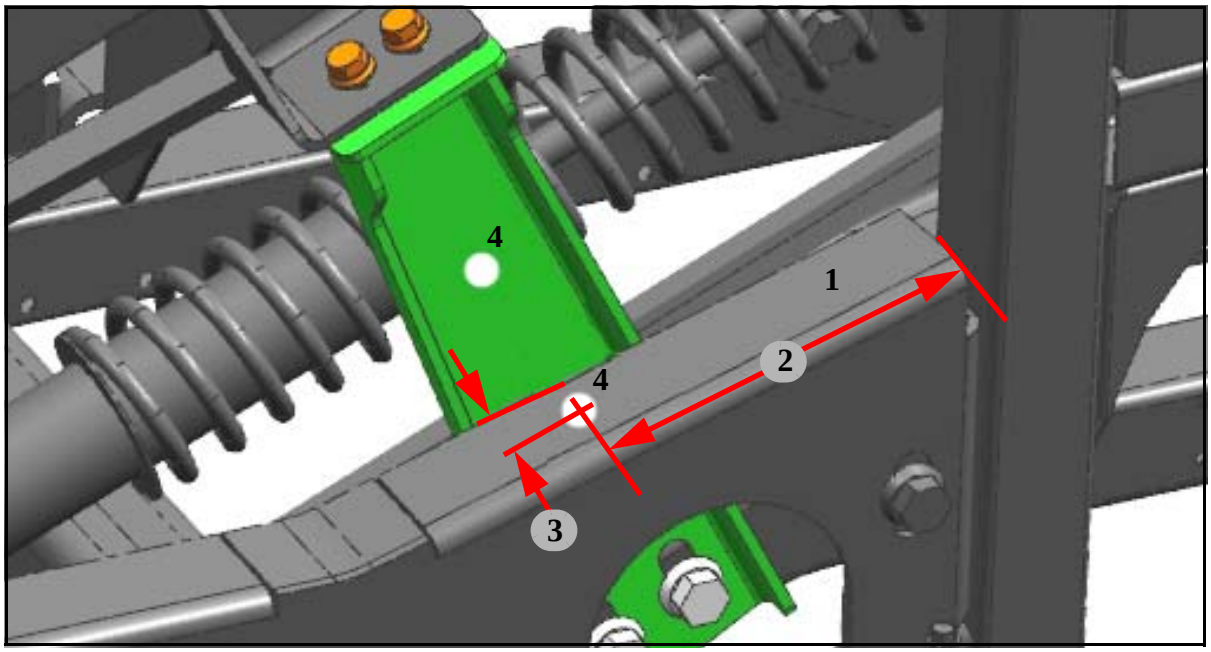

Figure 3. Idler pulley bracket angle drilled mounting hole dimensions.

Item	Figure 3 Description
1	Tie bar plate
2	6.00 inch
3	0.87 inch
4	Mounting holes

7. Orient and install the new snubber bracket, p/n 08-27-1327, idler pulley bracket angle, p/n 08-27-1326, and existing idler pulley as shown in Figure 4.

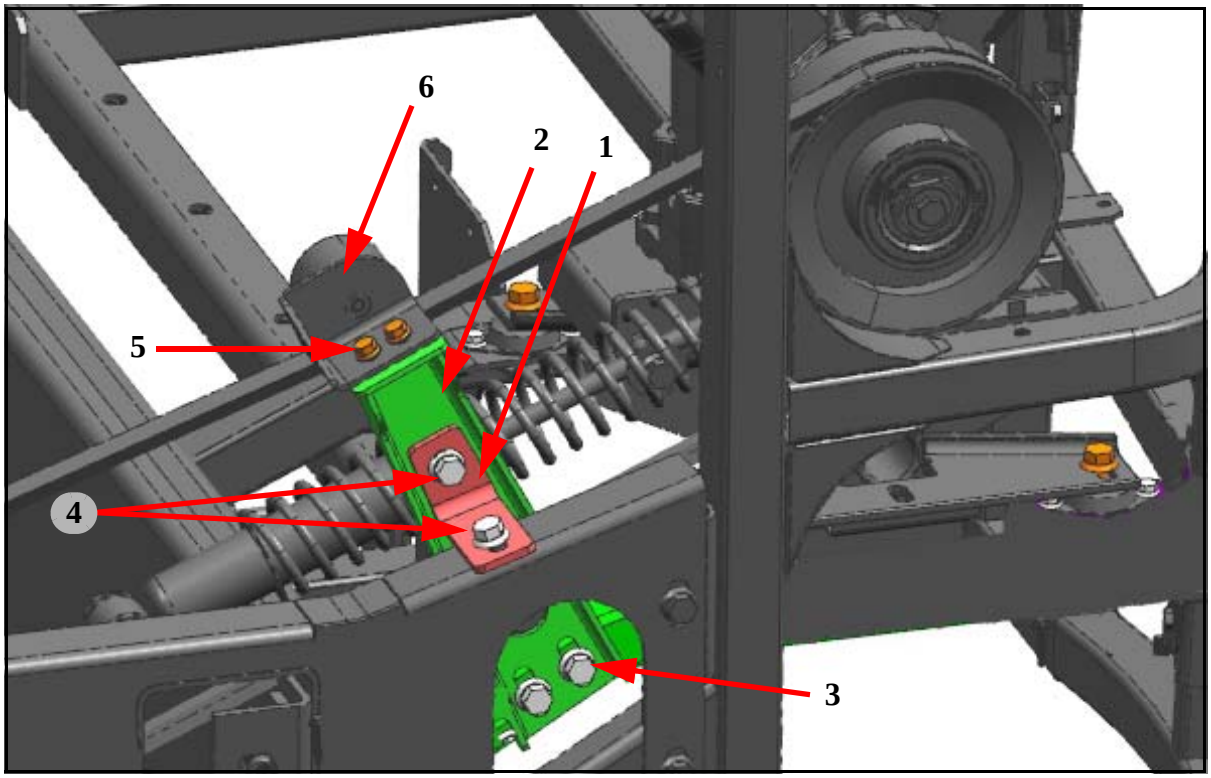

Figure 4. Idler pulley bracket angle and snubber bracket installation.

Item	Figure 4 Description
1	Angle, idler pulley bracket
2	Snubber bracket
3	Snubber bracket capscrew, p/n 19-01-1526 and flange nut, p/n 19-03-0497. Torque to 77-93 ft.-lbs
4	Angle capscrew, p/n 19-01-1577 and flange nut, p/n19-03-0497. Torque to 77-93 ft.-lbs
5	Idler pulley capscrew, p/n 19-01-1570 and lock nut,19-03-0535. Torque to 43-47 ft.-lbs
6	Idler pulley

8. Orient and re-install the A/C belt. Using a measuring tape and a straight edge, visually check to ensure a 3/8 belt deflection is achieved.

NOTICE

If a 3/8 inch belt deflection is NOT achieved, proceed to Step 9.

Only utilize a quantity of shims (one to three) that achieves a 3/8 inch belt deflection.

9. Remove the capscrew, p/n 19-01-1570 and lock nut,19-03-0535 mounting the idler pulley to the snubber bracket. Orient and position the shims, p/n 08-27-1324, between the idler pulley bracket and the snubber bracket (refer to Figure 5).
10. Orient and install new capscrews, p/n 19-01-1736, through the idler pulley holes and the shim(s). Install the locknuts, p/n 19-03-0535, on the capscrews. Torque to 43-47 ft-lbs.

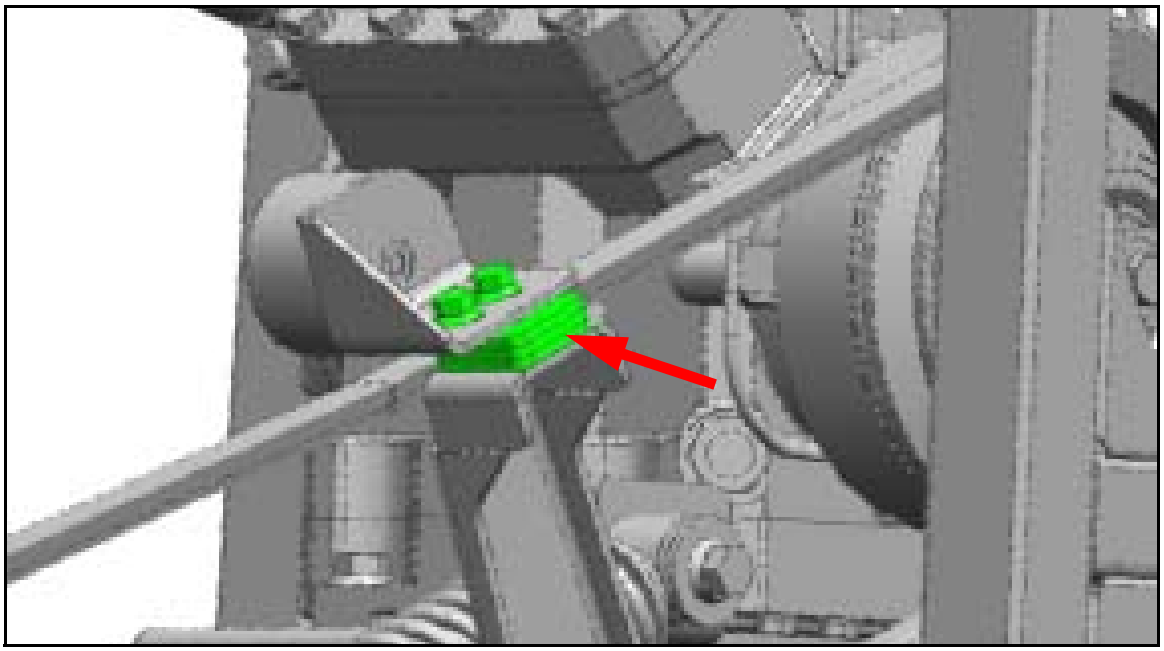

Figure 5. Addition of shim(s) to achieve a 3/8 inch belt deflection.

11. Using a laser tool or straight edge, check to ensure that belt alignment is 0.25 degree or 0.05 inch per foot of belt span.
12. Adjust the idler pulley to be centered to the belt.
13. Adjust the lower snubber to achieve a 1/4 inch gap to the belt.

No Cracks Found on Air Compressor Support Tube Procedure Complete.

⚠CAUTION

The weld disconnect procedure listed on Page 38 of this Service Bulletin must be performed prior to welding on the coach.

NOTICE

The secondary (lower) lavatory tank must be drained and empty to perform the retrofit.

⚠WARNING

The weight of the bumper must be supported prior to Step 14, to prevent component damage when removing the mounting hardware.

14. Open the engine compartment door. Lift to secure the engine compartment door in the open position. Locate the radiator compartment door yellow release handle inboard of the bumper on the roadside of the engine compartment. Pull the yellow release handle to open the radiator compartment door.
15. Push to secure the radiator compartment door in the open position. Locate the closing panel strip assembly and ground cable shown in Figure 6. Remove and retain the closing panel strip assembly mounting hardware. Carefully remove the closing panel strip assembly and place aside to be re-installed at a later step in this procedure. Using a marker and tape, label the mounting hardware for re-installation.

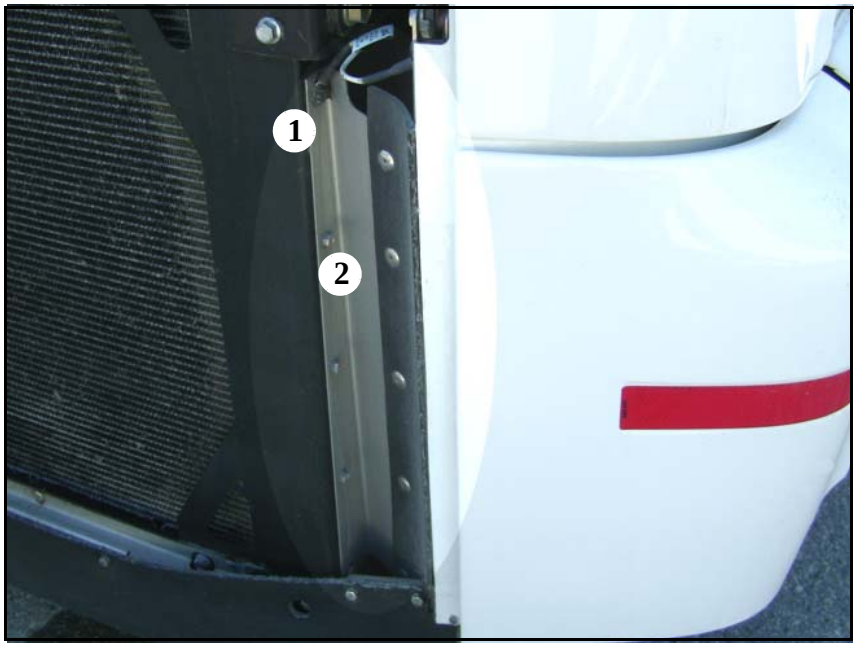

Figure 6. Radiator closing panel strip assembly.

Item	Figure 6 Description
1	Ground cable secured with mounting hardware
2	Mounting hardware

16. Remove and retain the rear bumper mounting hardware (refer to Figures 7 and 8). Carefully remove the bumper and place aside to be re-installed at a later step in this procedure. Using a marker and tape, label the rear bumper mounting hardware for re-installation.

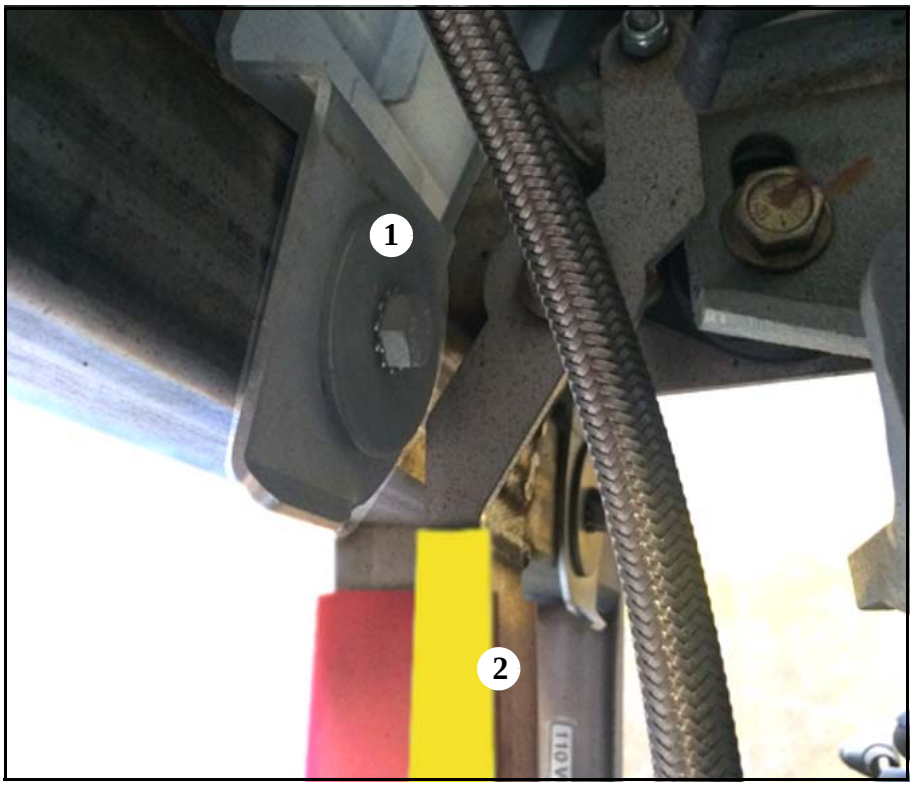

Figure 7. Line of sight view looking straight down positioned at the curbside, rear side service compartment.

Item	Figure 7 Description
1	Rear bumper mounting hardware, Item 2 / Figure 8
2	Engine compartment door release handle

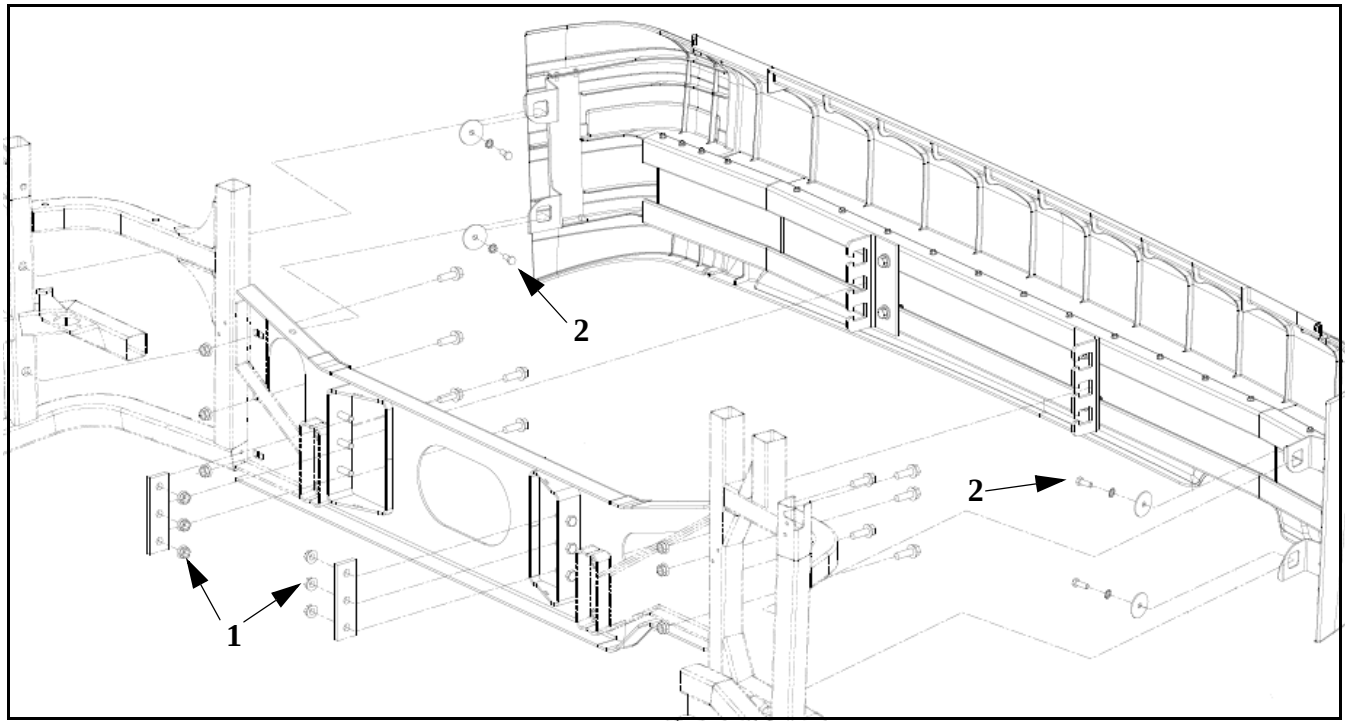

Figure 8. Bumper installation to coach frame.

Item	Figure 8 Description
1	Six (6) nuts
2	Four (4) bolts. Refer to item 1 / Figure 7.

WARNING

The weight of the tie bar plate must be supported prior to Step 17, to prevent component damage when removing the mounting hardware.

17. Remove and retain the tie bar plate mounting hardware (refer to Figure 9). Carefully remove the tie bar plate and place aside to be re-installed at a later step in this procedure. Using a marker and tape, label the tie bar plate mounting hardware, quantity of ten (10), for re-installation.

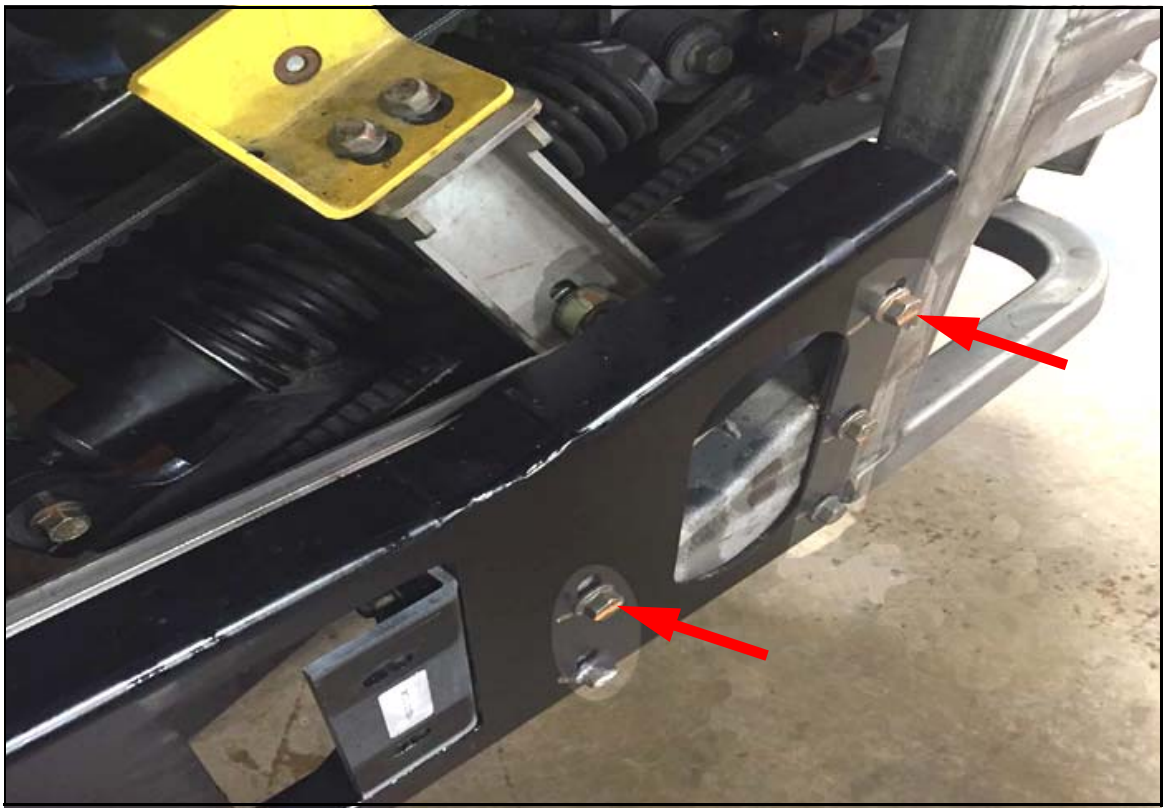

Figure 9. Tie bar plate installation.

18. Locate the engine power(positive) cable and booster post on the **drained**, secondary (lower) lavatory tank shown as Item 1 / Figure 10. Lift the protective red cover and remove the engine power cable and mounting hardware from the tank.
19. Locate and disconnect vent hose from the tank, Item 2 / Figure 10.
20. Ensure that the dump ball valve is in the SHUT position, Item 3 / Figure 10. Disconnect the hose clamp from the elbow on the dump tube assembly, Item 4 / Figure 10.

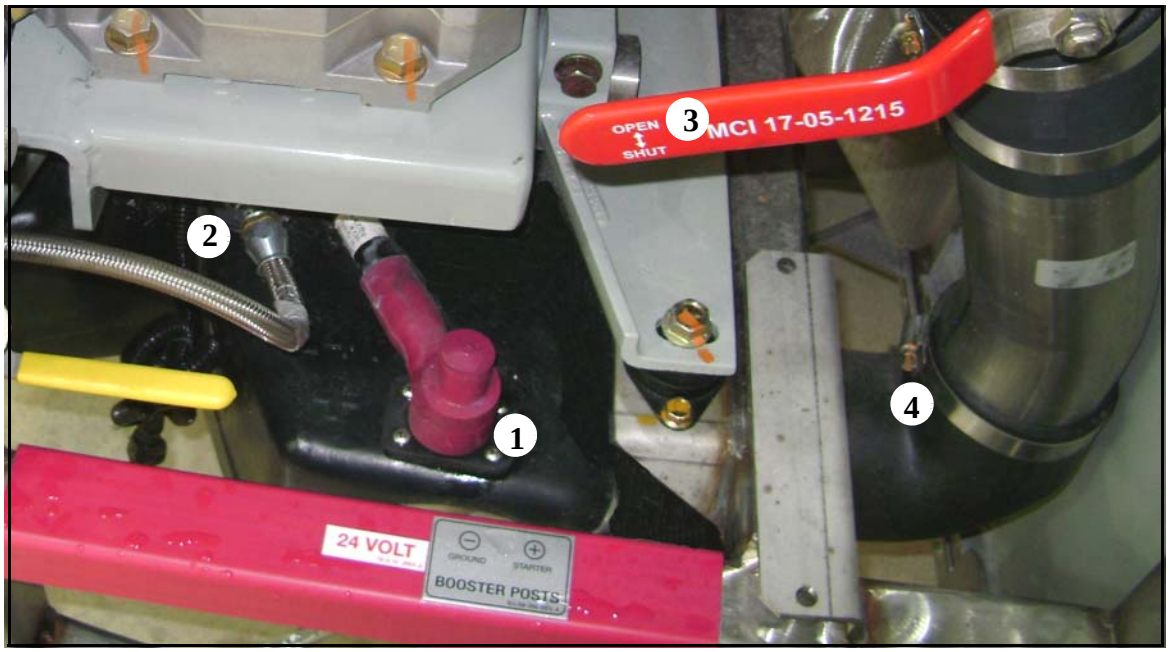

Figure 10. Secondary, lower lavatory tank assembly.

Item	Figure 10 Description
1	engine (positive) power cable, with red protective cover, and booster post
2	vent hose
3	Lavatory dump ball valve in the SHUT position
4	dump tube assembly elbow hose clamp

21. Locate the linkage positioned underneath the secondary (lower) lavatory tank shown in Figure 11. Disconnect the linkage for tank removal.

Figure 11. Linkage.

22. Locate the lavatory strap support capscrew shown in Figure 12. Remove and retain the lavatory strap support capscrew to be re-installed at a later step in this procedure.

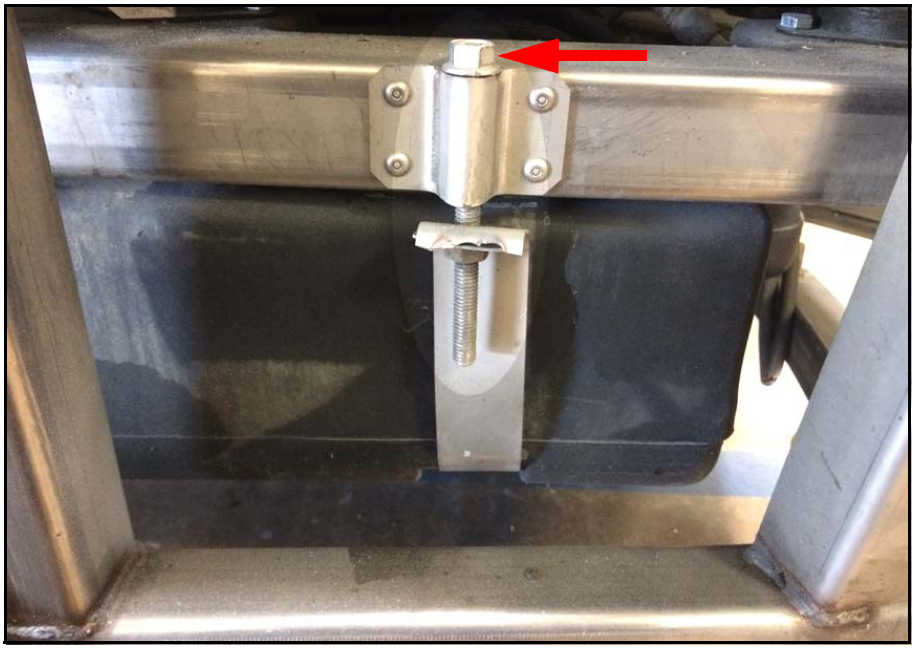

Figure 12. Lavatory strap support capscrew.

23. Re-position the secondary (lower) lavatory tank away from the retrofit area.
24. Locate the A/C belt tensioner, inboard of the A/C Bitzer compressor. Carefully position a ratchet strap around the tensioner and tighten ratchet to compress, until the tension has been removed allowing removal of the mounting hardware as shown in Figure 13. Using tape and a marker, label the A/C belt tensioner ends to ensure proper orientation when re-installing.
25. Remove and retain the A/C belt tensioner and mounting hardware to be re-installed at a later step in this procedure.

Figure 13. Reference photo of ratchet strap compressing tensioner.

WARNING

The weight of the compressor and pivot plate must be supported prior to removal of components.

26. Remove and retain the A/C compressor pivot plate mounting hardware and belt to be re-installed at a later step in this procedure. Re-position and support the A/C compressor away from the retrofit area.

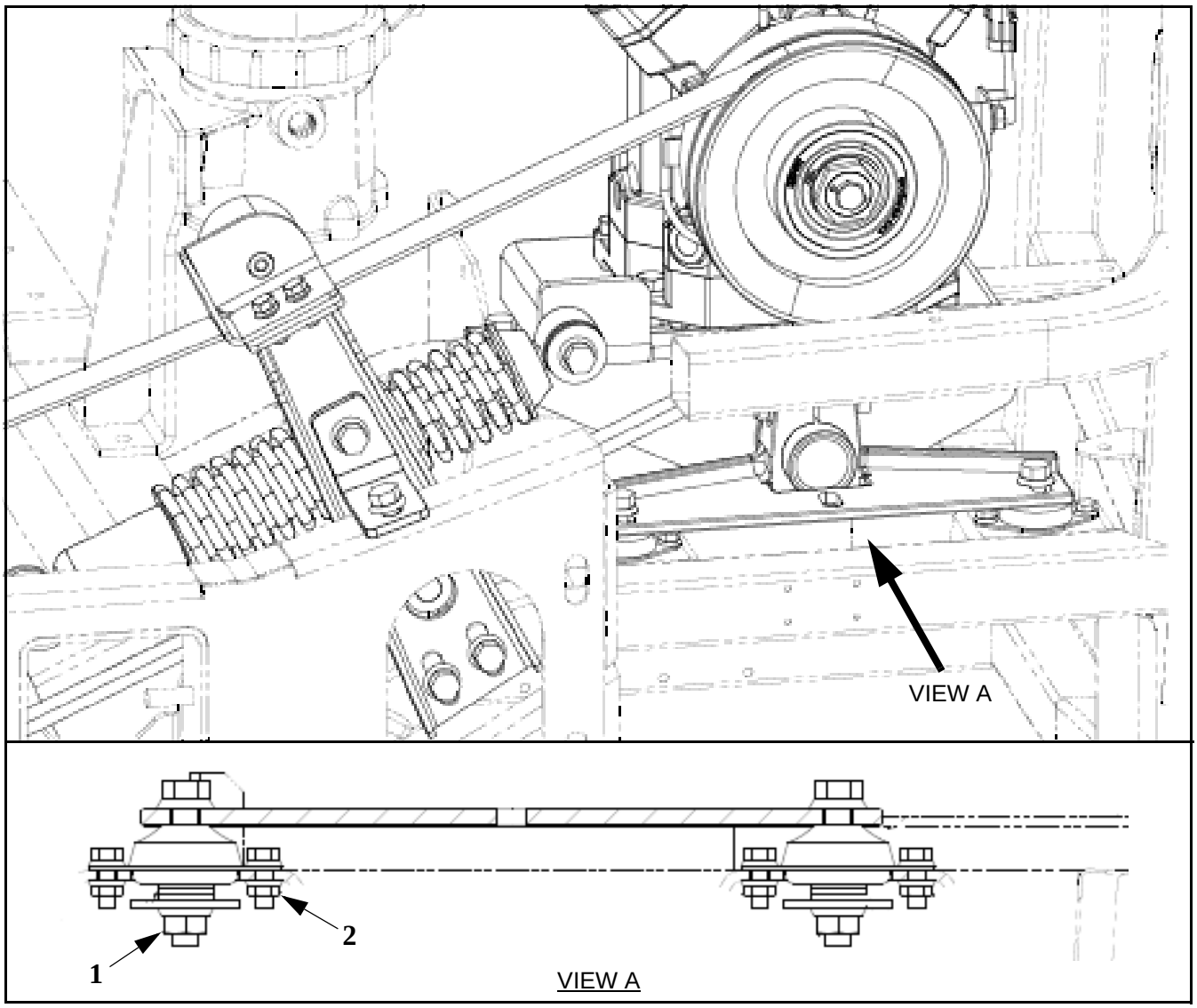

Figure 14. A/C compressor pivot plate installation.

Item	Figure 14 Description
1	Two (2) nuts
2	Four (4) nuts

⚠CAUTION

The weld disconnect procedure listed on Page 38 of this Service Bulletin must be performed prior to welding on the coach.

27. Perform the weld disconnect procedure.
28. Locate the existing snubber bracket assembly. Remove and discard the existing snubber bracket and mounting hardware.Retain the idler pulley to be re-installed at a later step in this procedure.
29. Drill a 0.125 diameter hole at both extreme ends of the crack. V-grind along the entire length of the crack. Fill drilled holes and v-grind with weld.
30. Orient and weld the support plates, p/n 03-59-4689, as shown in Figure 15.

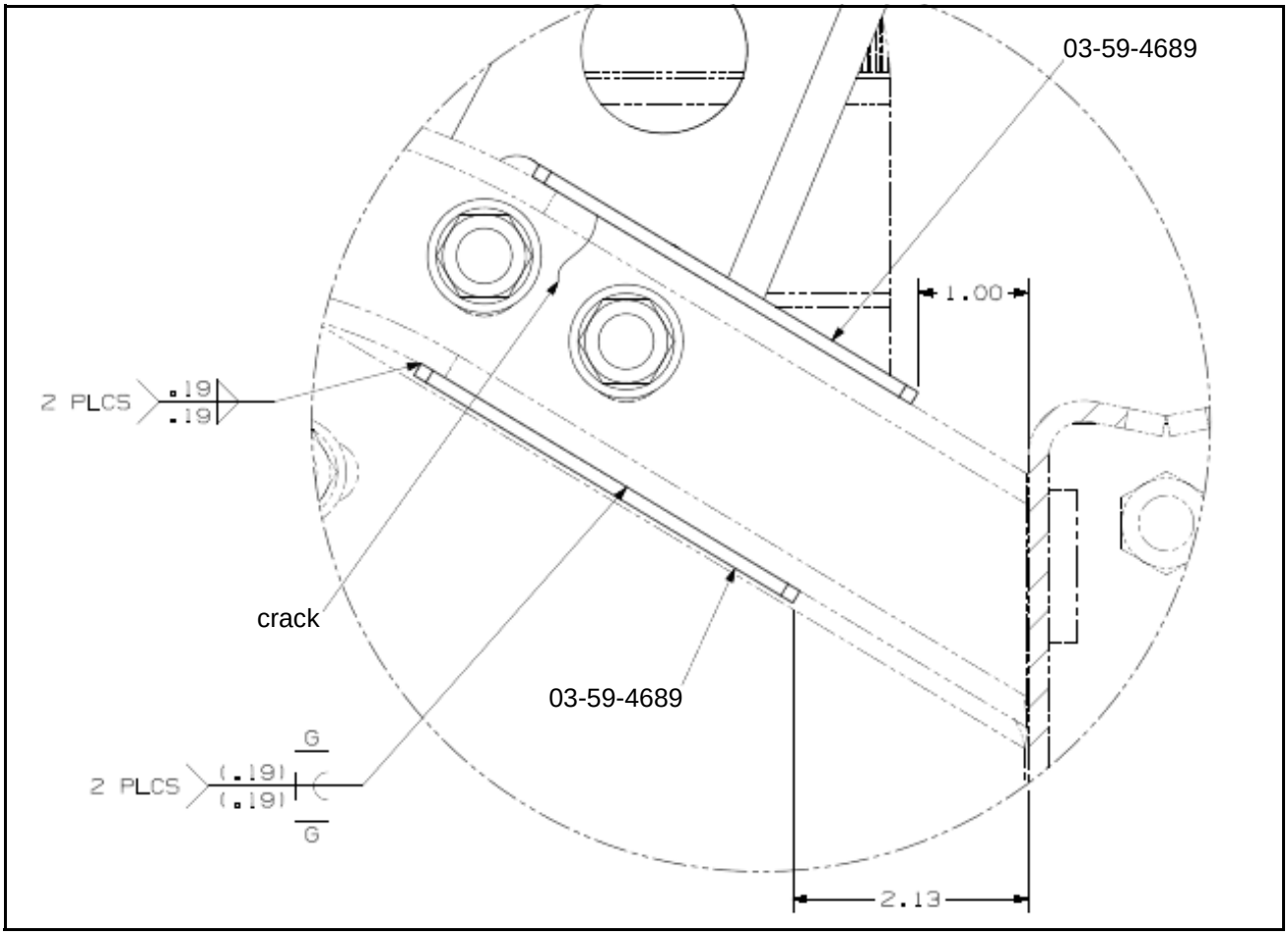

Figure 15. Weld information for support plates.

WARNING

Allow enough time for the welded area to cool down, prior to working in retrofit area.

31. Using a 17/32 inch drill bit and a drill, drill a mounting hole in the tie bar plate per the dimensions shown in Figure 16.

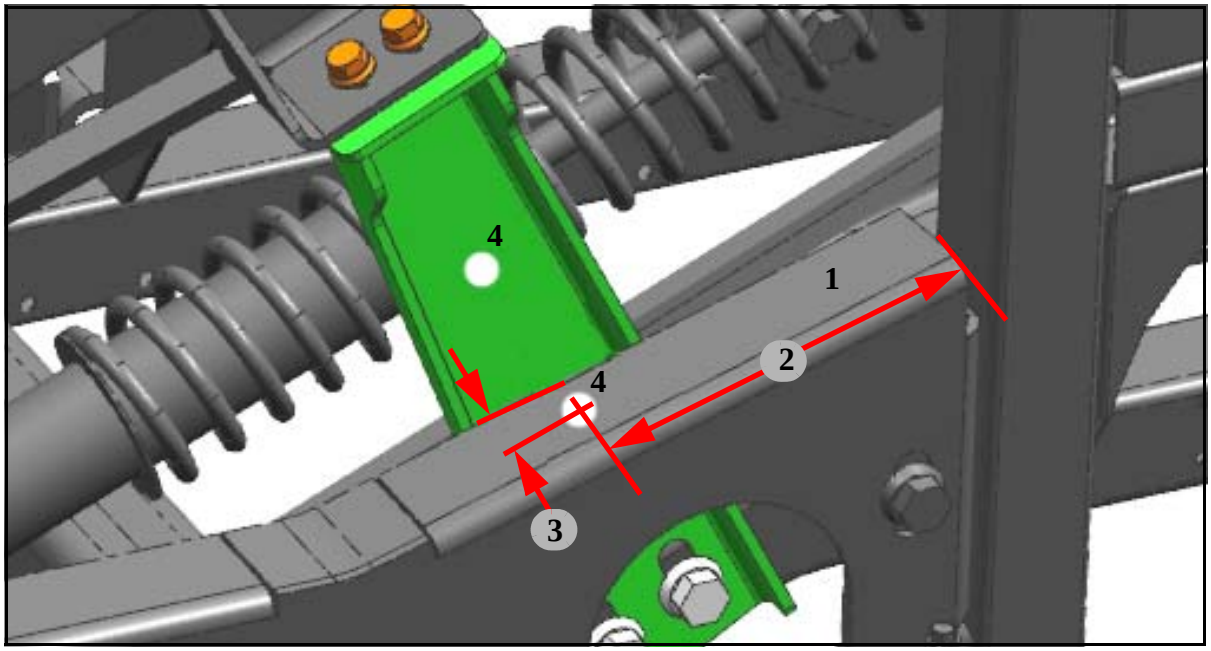

Figure 16. Idler pulley bracket angle drilled mounting hole dimensions.

Item	Figure 16 Description
1	Tie bar plate
2	6.00 inch
3	0.87 inch
4	Mounting holes

32. Orient and install the new snubber bracket, p/n 08-27-1327, idler pulley bracket angle, p/n 08-27-1326, and existing idler pulley as shown in Figure 17.

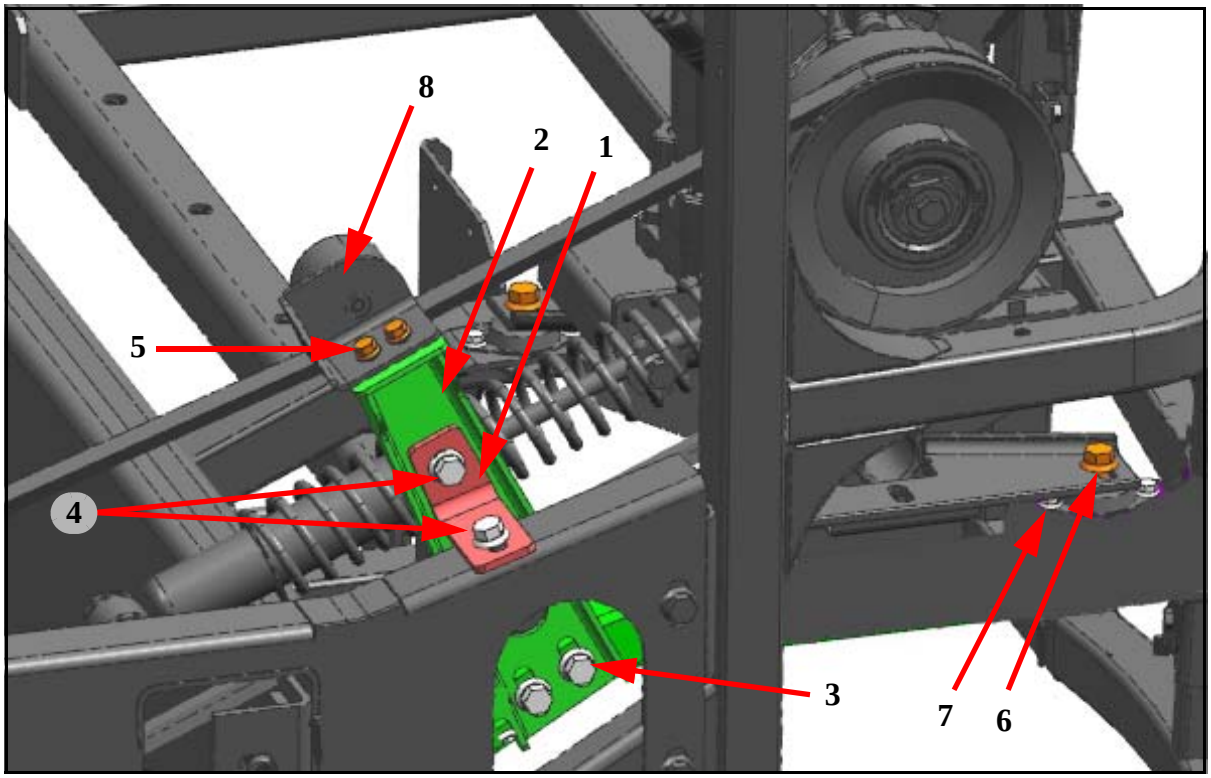

Figure 17. Idler pulley bracket angle and snubber bracket installation.

Item	Figure 17 Description
1	Angle, idler pulley bracket
2	Snubber bracket
3	Snubber bracket capscrew, p/n 19-01-1526 and flange nut, p/n 19-03-0497. Torque to 77-93 ft.-lbs
4	Angle capscrew, p/n 19-01-1577 and flange nut, p/n19-03-0497. Torque to 77-93 ft.-lbs
5	Idler pulley capscrew, p/n 19-01-1570 and lock nut,19-03-0535. Torque to 43-47 ft.-lbs
6	Compressor stabilizer (pivot plate / Figure 14), ref p/n's 19-01-1529, 19-03-0497. Torque to 63-77 ft.-lbs
7	Stabilizer to brackets (pivot plate / Figure 14), ref p/n's 19-01-1532, 19-03-0498. Torque to 14-16 ft.-lbs
8	Idler pulley

33. Orient and re-install the A/C belt. Using a measuring tape and a straight edge, visually check to ensure a 3/8 belt deflection is achieved.

NOTICE

If a 3/8 inch belt deflection is NOT achieved, proceed to Step 34.

Only utilize a quantity of shims (one to three) that achieves a 3/8 inch belt deflection.

34. Remove the capscrew, p/n 19-01-1570 and lock nut,19-03-0535 mounting the idler pulley to the snubber bracket. Orient and position the required quantity of shims, p/n 08-27-1324, between the idler pulley bracket and the snubber bracket (refer to Figure 18).
35. Orient and install new capscrews, p/n 19-01-1736, through the idler pulley holes and the shim(s). Install the locknuts, p/n 19-03-0535, on the capscrews. Torque to 43-47 ft-lbs.

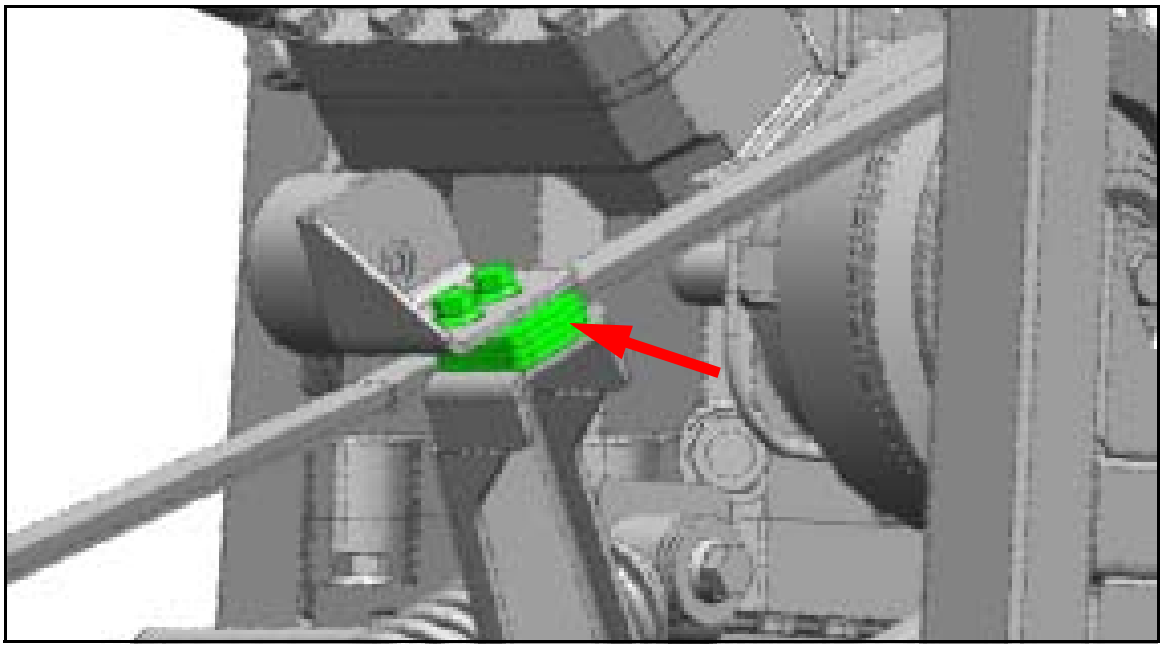

Figure 18. Addition of shim(s) to achieve a 3/8 inch belt deflection.

NOTICE

The compressor base may require forward or aft positioning to achieve proper belt alignment.

36. Using a laser tool or straight edge, check to ensure that belt alignment is 0.25 degree or 0.05 inch per foot of belt span.
37. Adjust the idler pulley to be centered to the belt.
38. Adjust the lower snubber to achieve a 1/4 inch gap to the belt.
39. Re-orient the A/C belt tensioner, following the labeled ends, back to the installation area. Using the existing mounting hardware, secure in position. Torque capscrews to 77-93 ft-lbs. Carefully remove the ratchet strap.

40. Re-orient the secondary (lower) lavatory tank back to the installation area.
41. Orient and re-connect the linkage positioned underneath the secondary (lower) lavatory tank shown in Figure 11.
42. Orient the lavatory strap support to the secondary (lower) lavatory tank and use the existing capscrew to secure in position and tight against the frame (refer to Figure 12). Torque the capscrew to 20-23 ft-lbs.
43. Orient and re-connect the hose clamp to the elbow on the dump tube assembly (refer to Figure 10). Tighten the hose clamp to secure installation.
44. Orient and re-connect vent hose to the tank (refer to Figure 10).
45. Orient and re-connect the engine power cable to the junction block on the secondary (lower) lavatory tank as shown in Figure 10. Shield with the red protective cover.
46. Using the existing hardware, orient and mount the tie bar plate to the coach frame (refer to Figure 9). Torque capscrews to 100-104 ft-lbs. Apply torque seal to the capscrew heads.
47. Lift and orient the bumper to the rear frame. Push down on the bumper to secure in position. Visually inspect to ensure that the side bumper brackets are orientated.
48. Install the bumper mounting hardware hand tight. Visually inspect the bumper for proper alignment. Close and open the engine compartment door to ensure no interference. Adjust bumper as required.
49. Align the side bumpers to follow the fender edge. Tighten the two (2) bolts to secure position. Torque to 18-22 ft-lbs. (refer to Figure 19). Repeat to the opposite side of the coach.
50. Torque the six (6) center bolts to 100-123 ft-lbs. (refer to Figure 19).
51. Using the existing hardware, orient and mount the radiator closing panel strip assembly and ground cable shown in Figure 6.

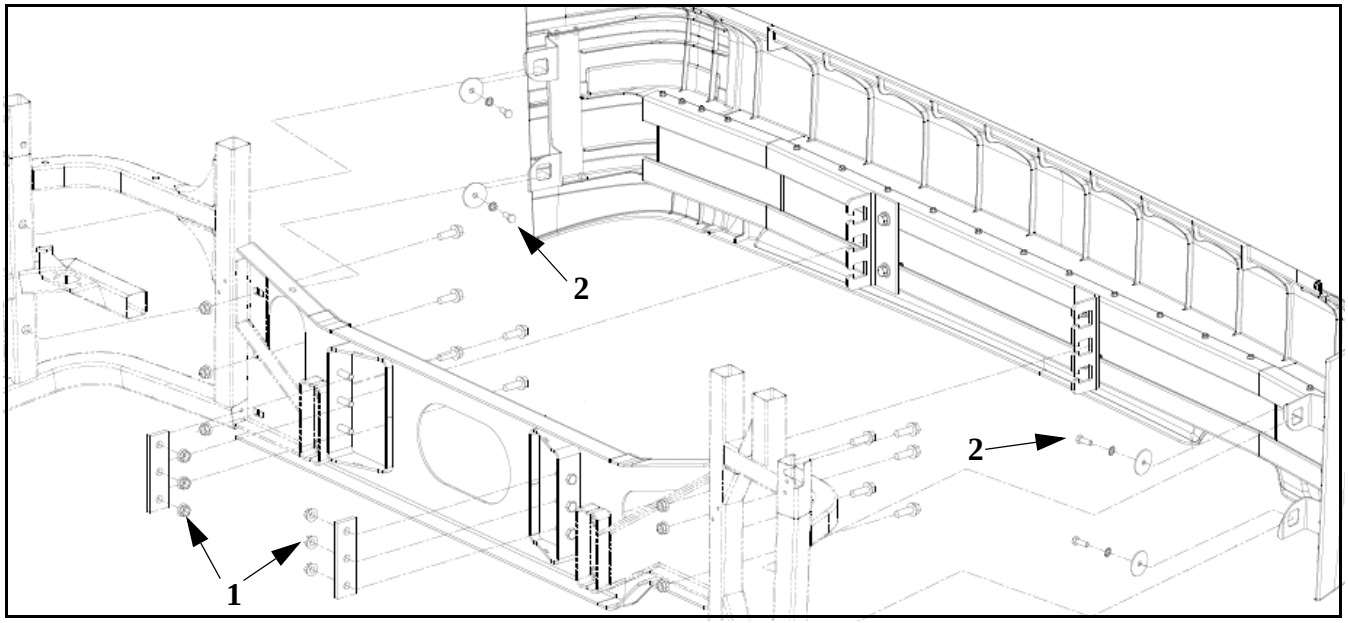

Figure 19. Bumper installation to coach frame.

Item	Figure 19 Description
1	Torque six (6) nuts to 100-123 ft.-lbs.
2	Torque four (4) bolts to 18-22 ft.-lbs

52. Re-orient the A/C compressor pivot plate into position. Using the existing mounting hardware, re-install the A/C compressor pivot plate as shown in Figure 20.

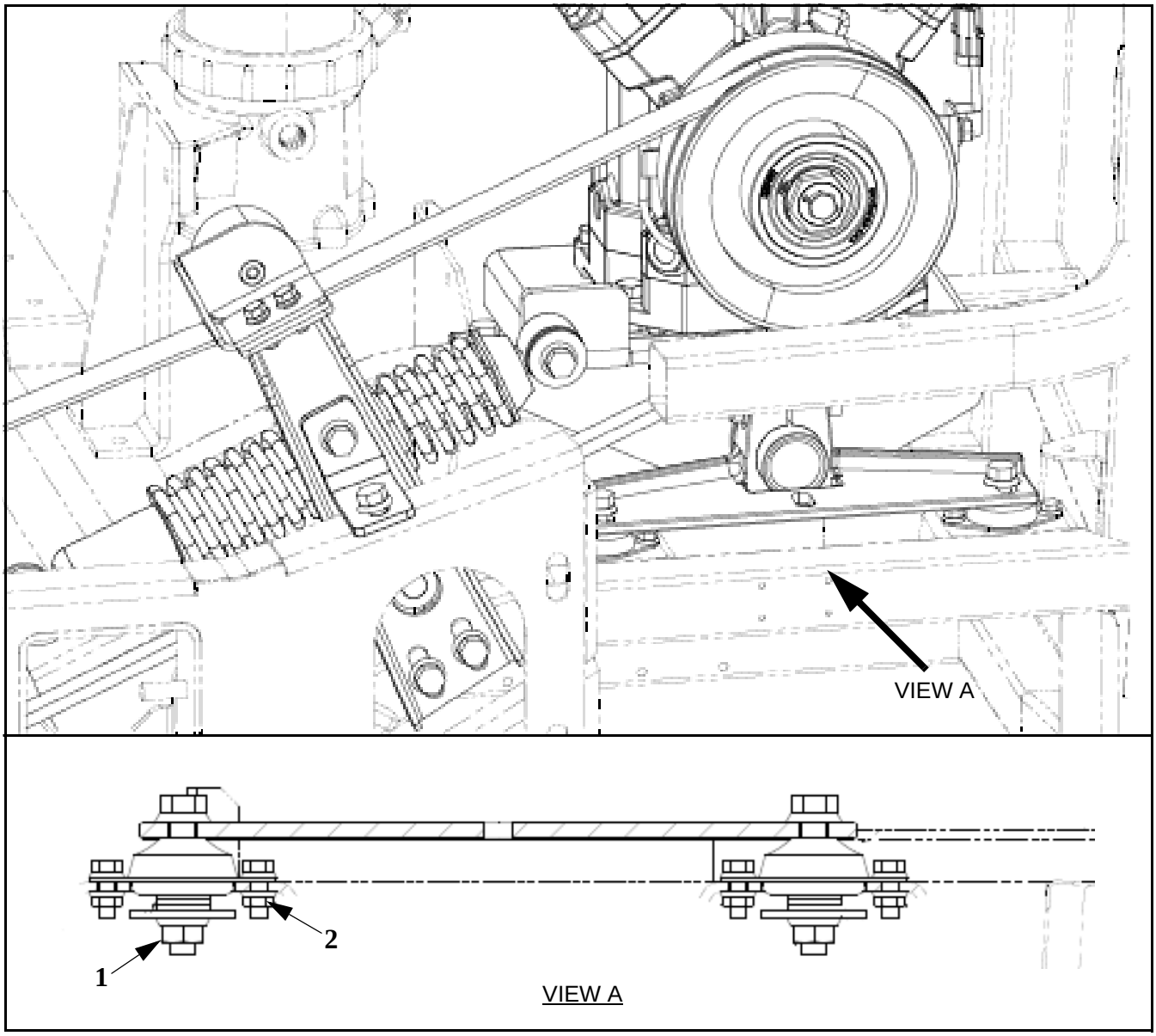

Figure 20. A/C compressor pivot plate installation.

Item	Figure 20 Description
1	Torque two (2) nuts to 63-77 ft.-lbs.
2	Torque four (4) nuts to 14-16 ft.-lbs

53. Perform the weld reconnect procedure listed on Page 39.

Crack Found on Air Compressor Support Tube Procedure Complete.

⚠CAUTION

The weld disconnect procedure listed on Page 38 of this Service Bulletin must be performed prior to welding on the coach.

NOTICE

The secondary (lower) lavatory tank must be drained and empty to perform the retrofit.

⚠WARNING

The weight of the bumper must be supported prior to Step 54, to prevent component damage when removing the mounting hardware.

54. Open the engine compartment door. Lift to secure the engine compartment door in the open position. Locate the radiator compartment door yellow release handle inboard of the bumper on the roadside of the engine compartment. Pull the yellow release handle to open the radiator compartment door.
55. Push to secure the radiator compartment door in the open position. Locate the closing panel strip assembly and ground cable shown in Figure 21. Remove and retain the closing panel strip assembly mounting hardware. Carefully remove the closing panel strip assembly and place aside to be re-installed at a later step in this procedure. Using a marker and tape, label the mounting hardware for re-installation.

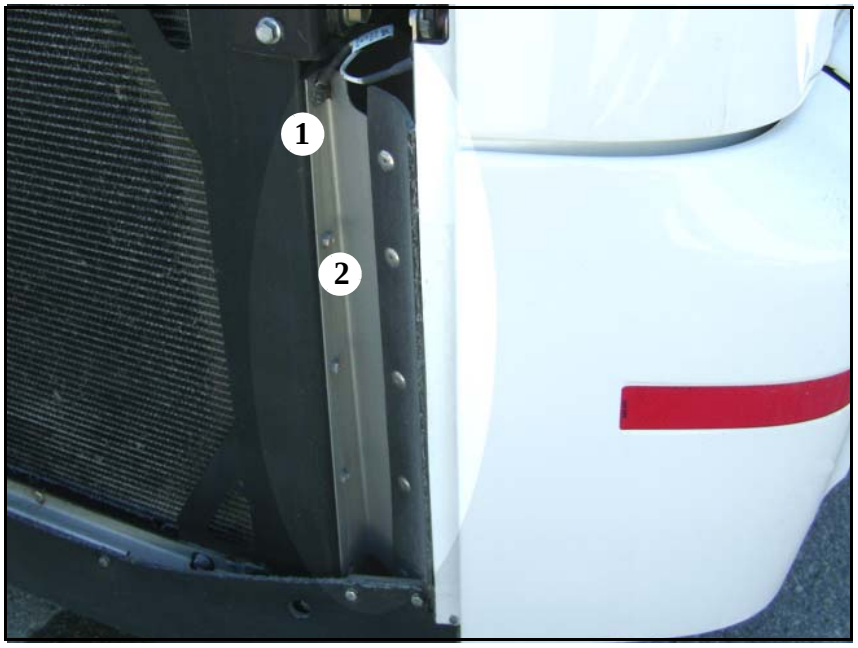

Figure 21. Radiator closing panel strip assembly.

Item	Figure 21 Description
1	Ground cable secured with mounting hardware
2	Mounting hardware

56. Remove and retain the rear bumper mounting hardware (refer to Figures 22 and 23). Carefully remove the bumper and place aside to be re-installed at a later step in this procedure. Using a marker and tape, label the rear bumper mounting hardware for re-installation.

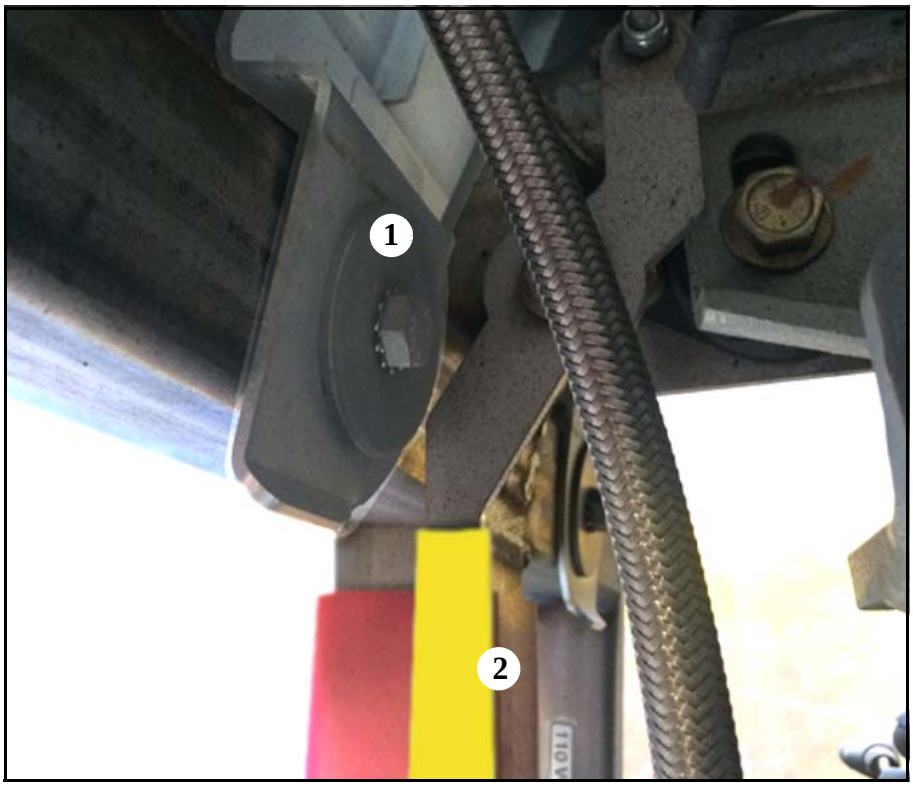

Figure 22. Line of sight view looking straight down positioned at the curbside, rear side service compartment.

Item	Figure 22 Description
1	Rear bumper mounting hardware, Item 2 / Figure 23
2	Engine compartment door release handle

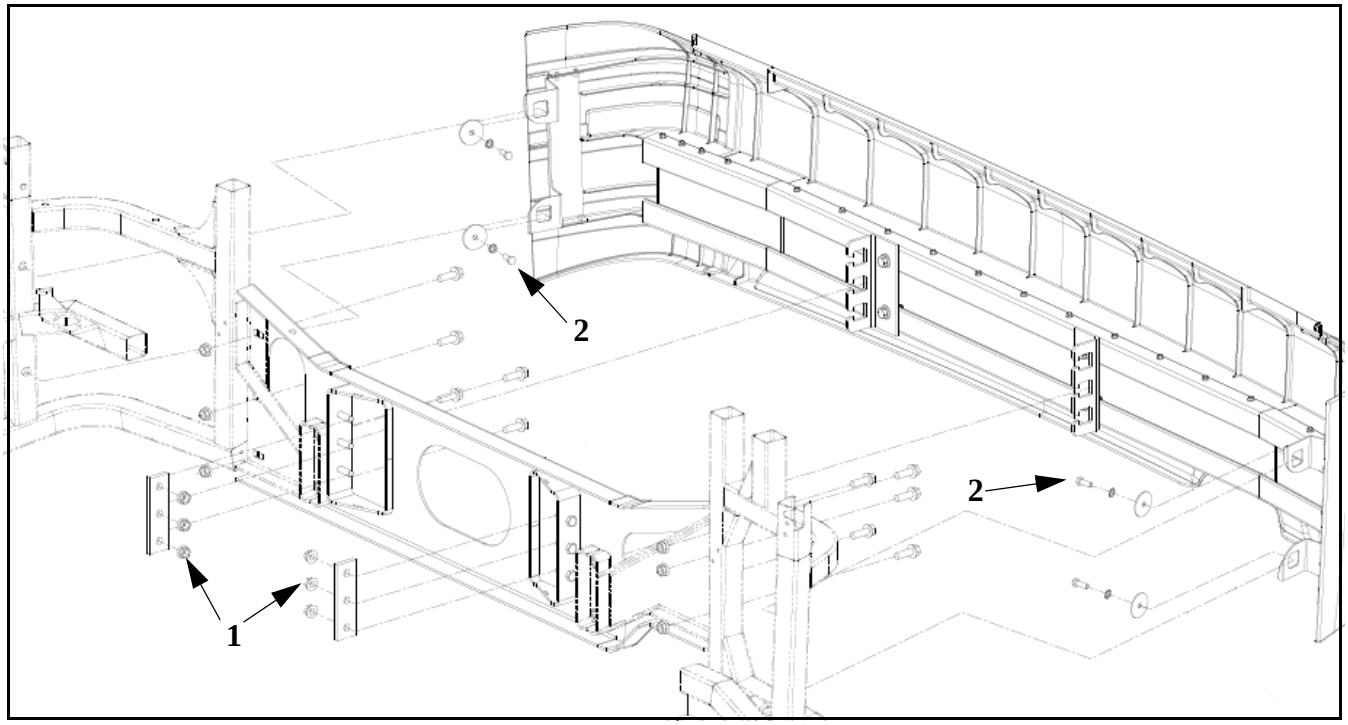

Figure 23. Bumper installation to coach frame.

Item	Figure 23 Description
1	Six (6) nuts
2	Four (4) bolts. Refer to item 1 / Figure 22.

WARNING

The weight of the tie bar plate must be supported prior to Step 57, to prevent component damage when removing the mounting hardware.

57. Remove and retain the tie bar plate mounting hardware (refer to Figure 24). Carefully remove the tie bar plate and place aside to be re-installed at a later step in this procedure. Using a marker and tape, label the tie bar plate mounting hardware, quantity of ten (10), for re-installation.

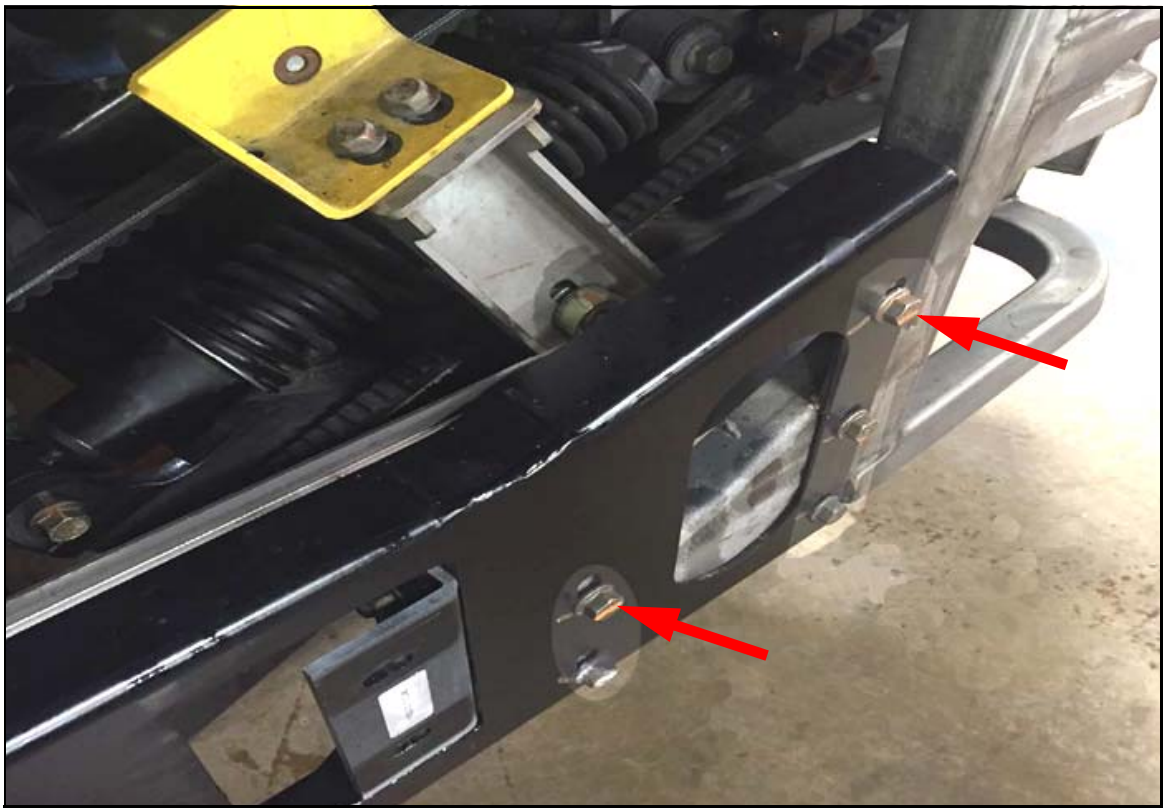

Figure 24. Tie bar plate installation.

58. Locate the engine power(positive) cable and booster post on the **drained**, secondary (lower) lavatory tank shown as Item 1 / Figure 25. Lift the protective red cover and remove the engine power cable and mounting hardware from the tank.
59. Locate and disconnect vent hose from the tank, Item 2 / Figure 25.
60. Ensure that the dump ball valve is in the SHUT position, Item 3 / Figure 25. Disconnect the hose clamp from the elbow on the dump tube assembly, Item 4 / Figure 25.

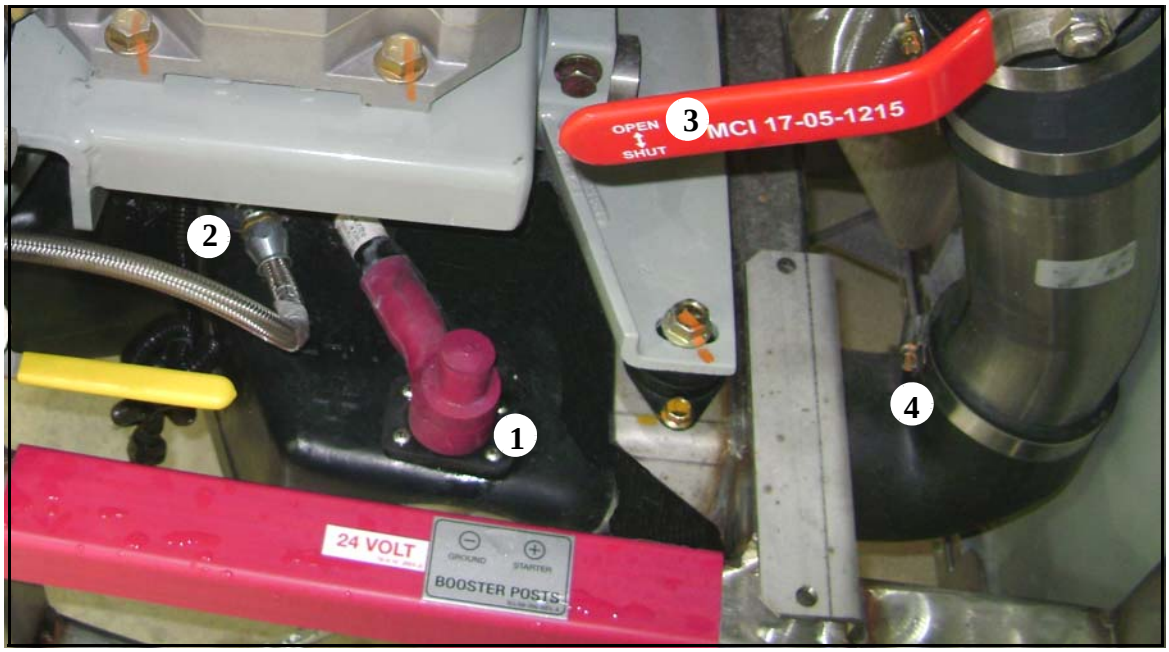

Figure 25. Secondary, lower lavatory tank assembly.

Item	Figure 25 Description
1	engine (positive) power cable, with red protective cover, and booster post
2	vent hose
3	Lavatory dump ball valve in the SHUT position
4	dump tube assembly elbow hose clamp

61. Locate the linkage positioned underneath the secondary (lower) lavatory tank shown in Figure 26. Disconnect the linkage for tank removal.

Figure 26. Linkage.

62. Locate the lavatory strap support capscrew shown in Figure 27. Remove and retain the lavatory strap support capscrew to be re-installed at a later step in this procedure.

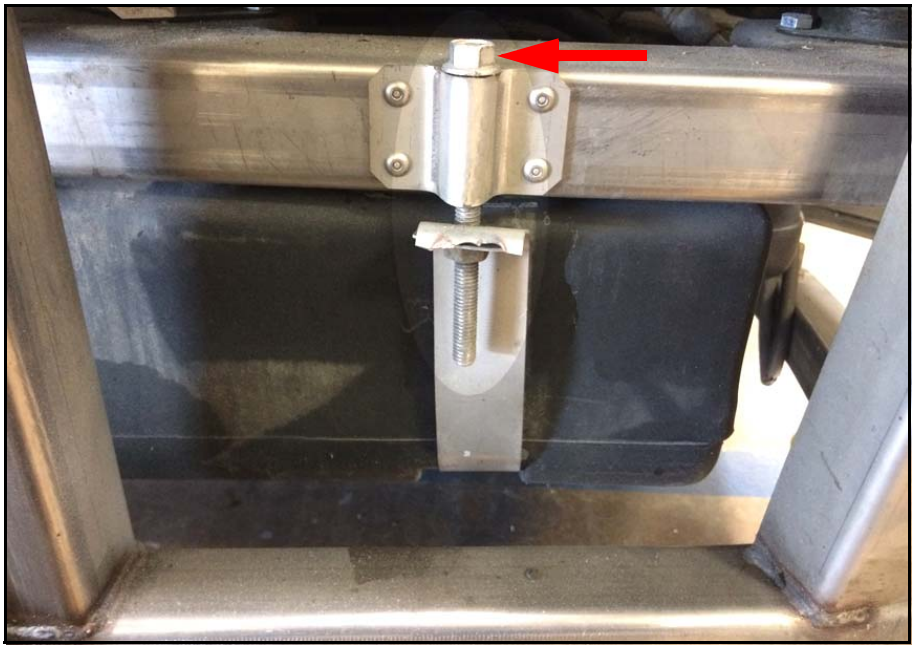

Figure 27. Lavatory strap support capscrew.

63. Re-position the secondary (lower) lavatory tank away from the retrofit area.
64. Locate the A/C belt tensioner, inboard of the A/C Bitzer compressor. Carefully position a ratchet strap around the tensioner and tighten ratchet to compress until the tension has been removed allowing removal of the mounting hardware, as shown in Figure 28. Using tape and a marker, label the A/C belt tensioner ends to ensure proper orientation when re-installing.
65. Remove and retain the A/C belt tensioner and mounting hardware to be re-installed at a later step in this procedure.

Figure 28. Reference photo of ratchet strap compressing tensioner.

WARNING

The weight of the compressor and pivot plate must be supported prior to removal of components.

66. Remove and retain the A/C compressor pivot plate mounting hardware and belt to be re-installed at a later step in this procedure. Re-position and support the A/C compressor away from the retrofit area.

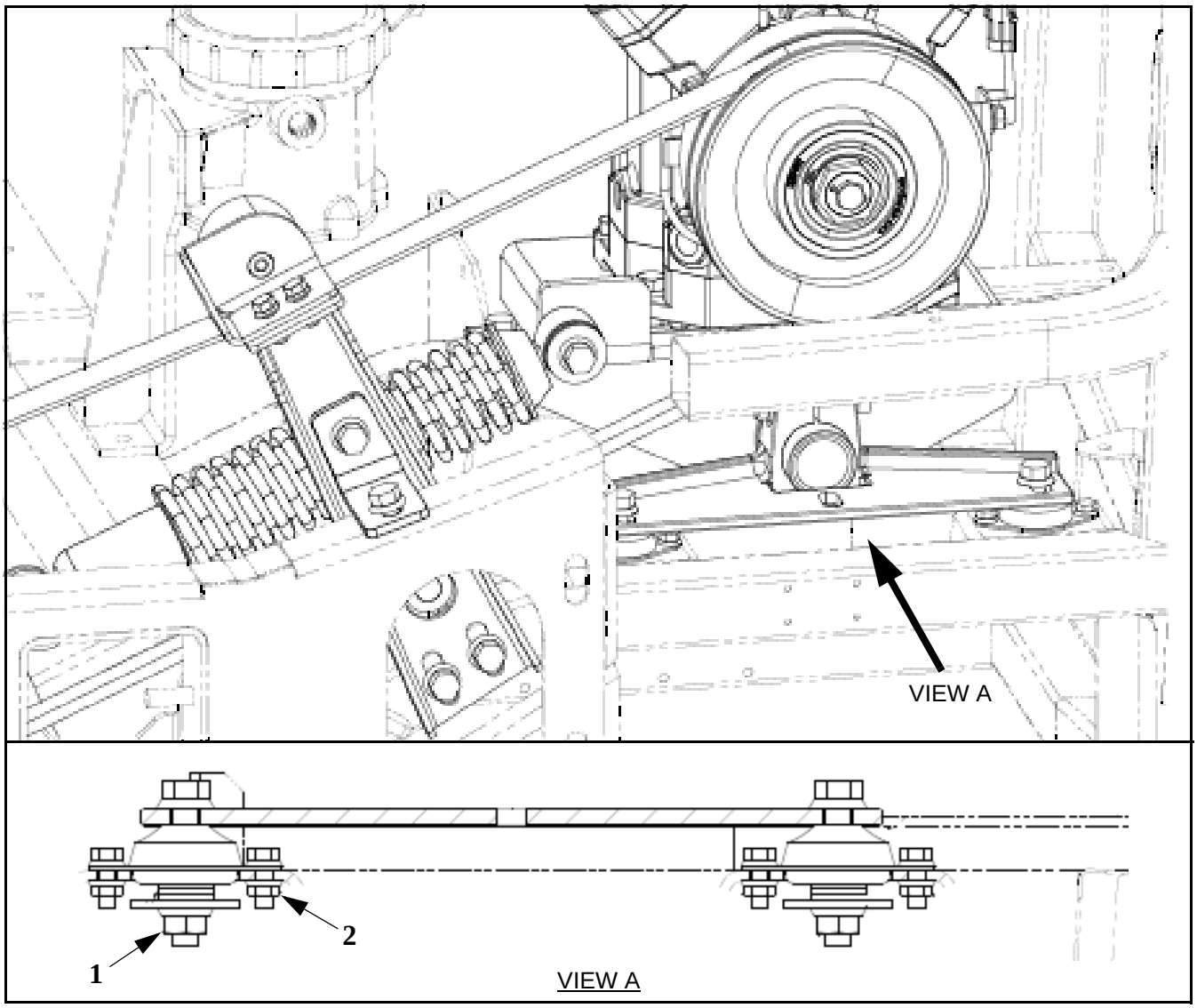

Figure 29. A/C compressor pivot plate installation.

Item	Figure 29 Description
1	Two (2) nuts
2	Four (4) nuts

⚠CAUTION

The weld disconnect procedure listed on Page 38 of this Service Bulletin must be performed prior to welding on the coach.

67. Perform the weld disconnect procedure.
68. Carefully cut and grind away existing cracked support tube shown in Figures 30 and 31.
69. Orient and weld the new tube assembly, p/n 03-59-4739, to the existing structure and engine rail as shown in Figures 30 and 31.

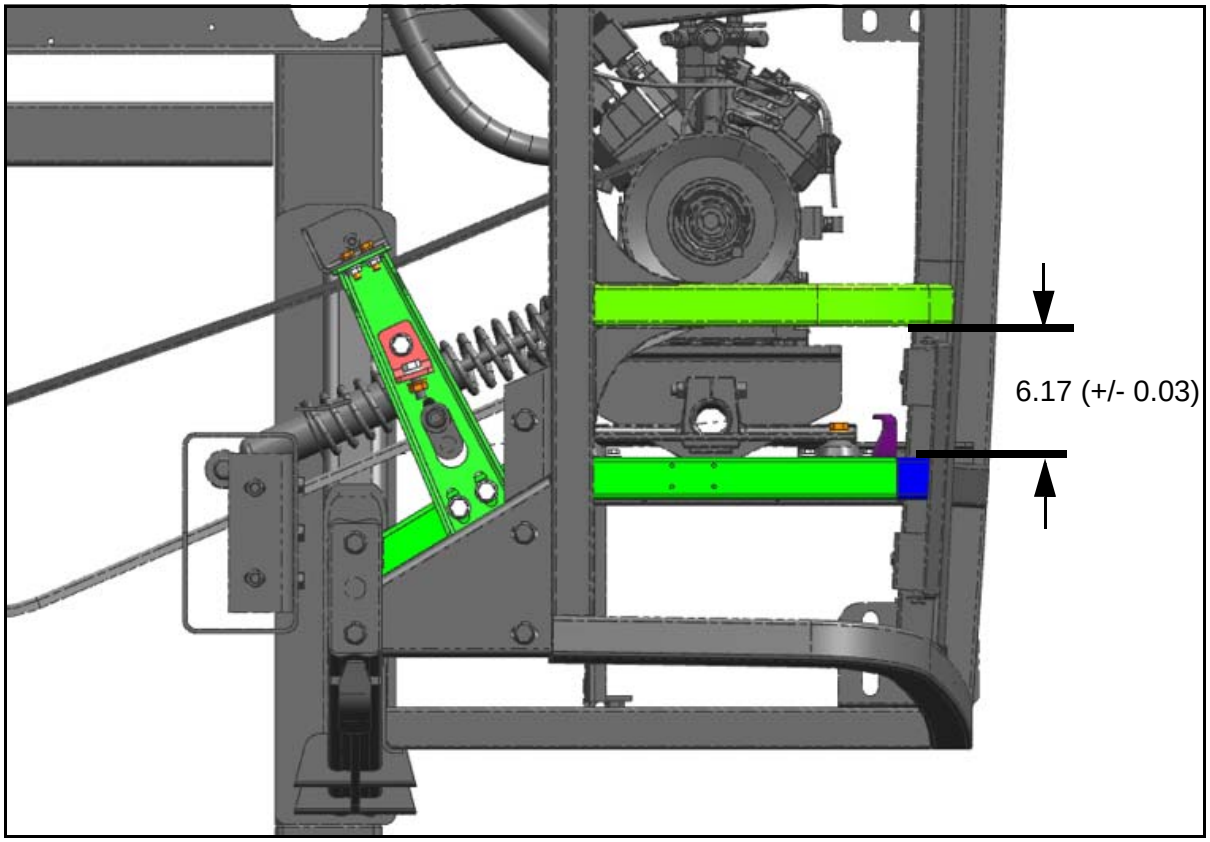

Figure 30. New tube assembly orientation.

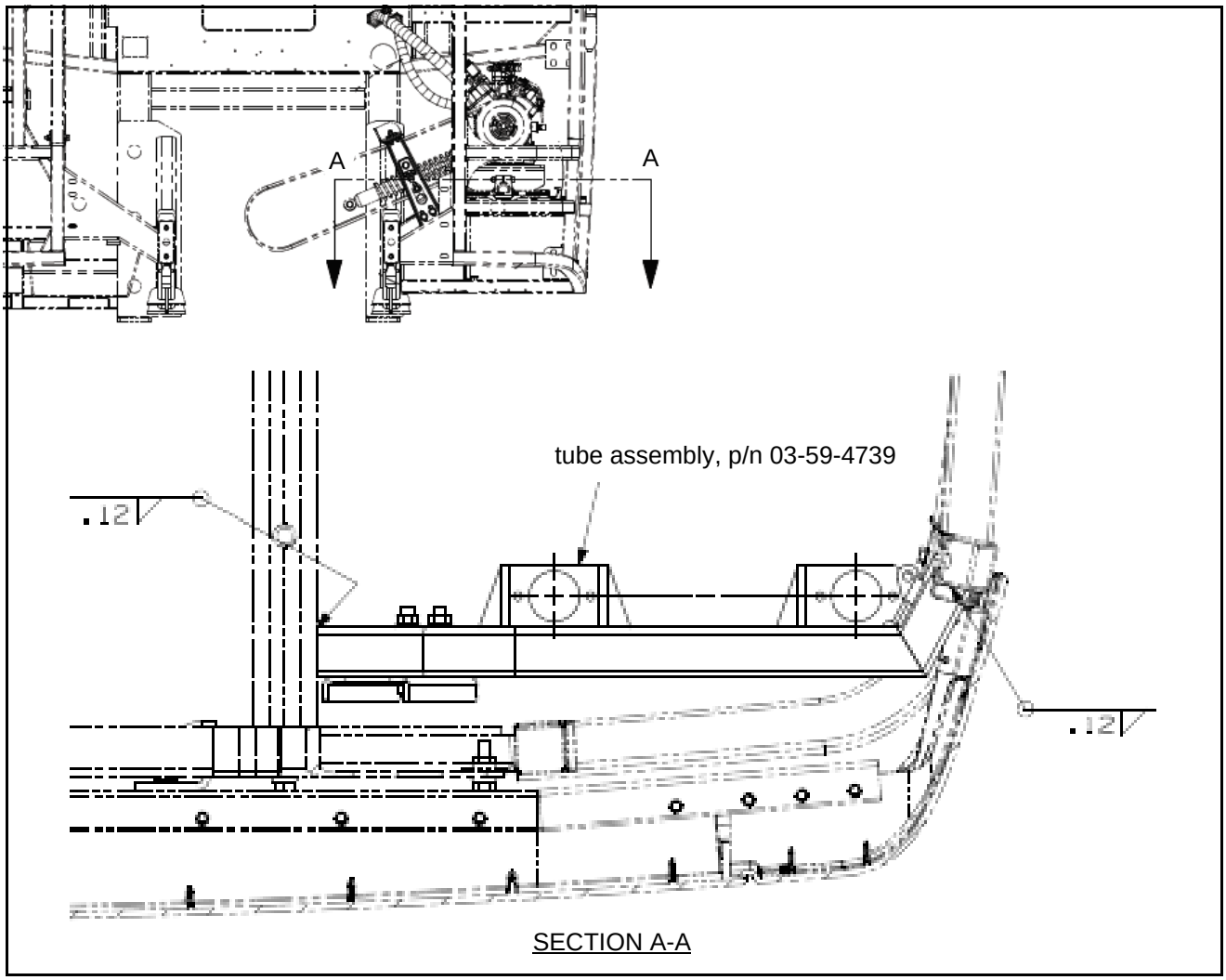

Figure 31. Weld information for new tube assembly.

WARNING

Allow enough time for the welded area to cool down, prior to working in retrofit area.

70. Using a 17/32 inch drill bit and a drill, drill a mounting hole in the tie bar plate per the dimensions shown in Figure 32.

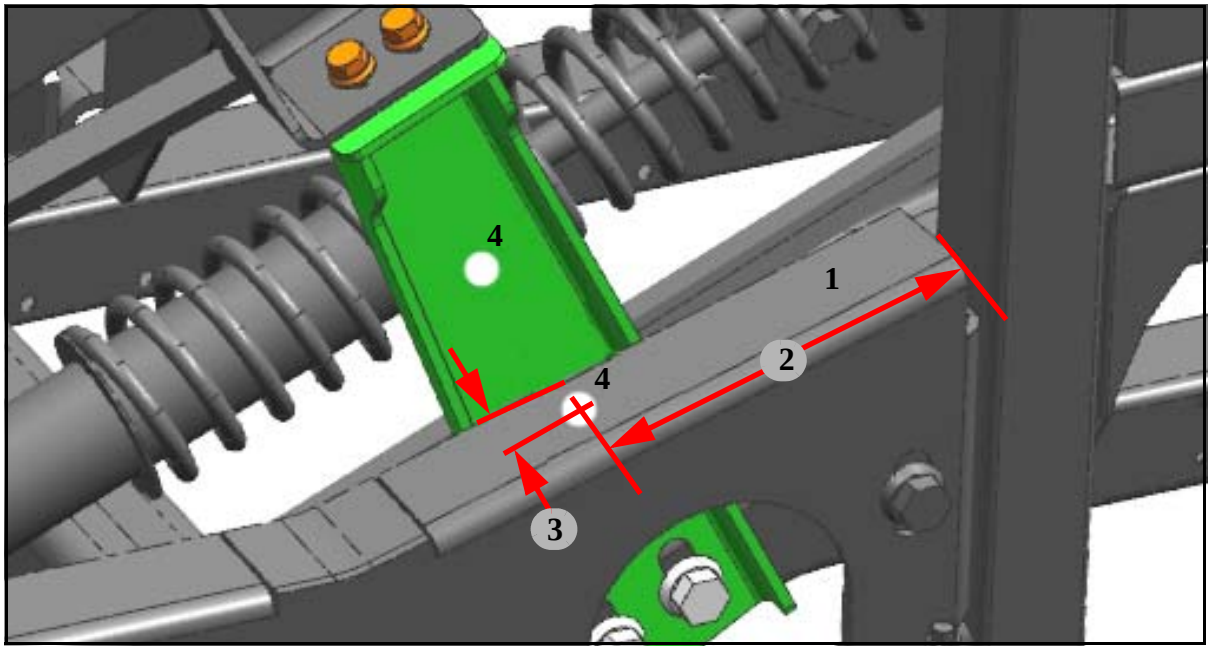

Figure 32. Idler pulley bracket angle drilled mounting hole dimensions.

Item	Figure 32 Description
1	Tie bar plate
2	6.00 inch
3	0.87 inch
4	Mounting holes

71. Orient and install the new snubber bracket, p/n 08-27-1327, idler pulley bracket angle, p/n 08-27-1326, and existing idler pulley as shown in Figure 33.

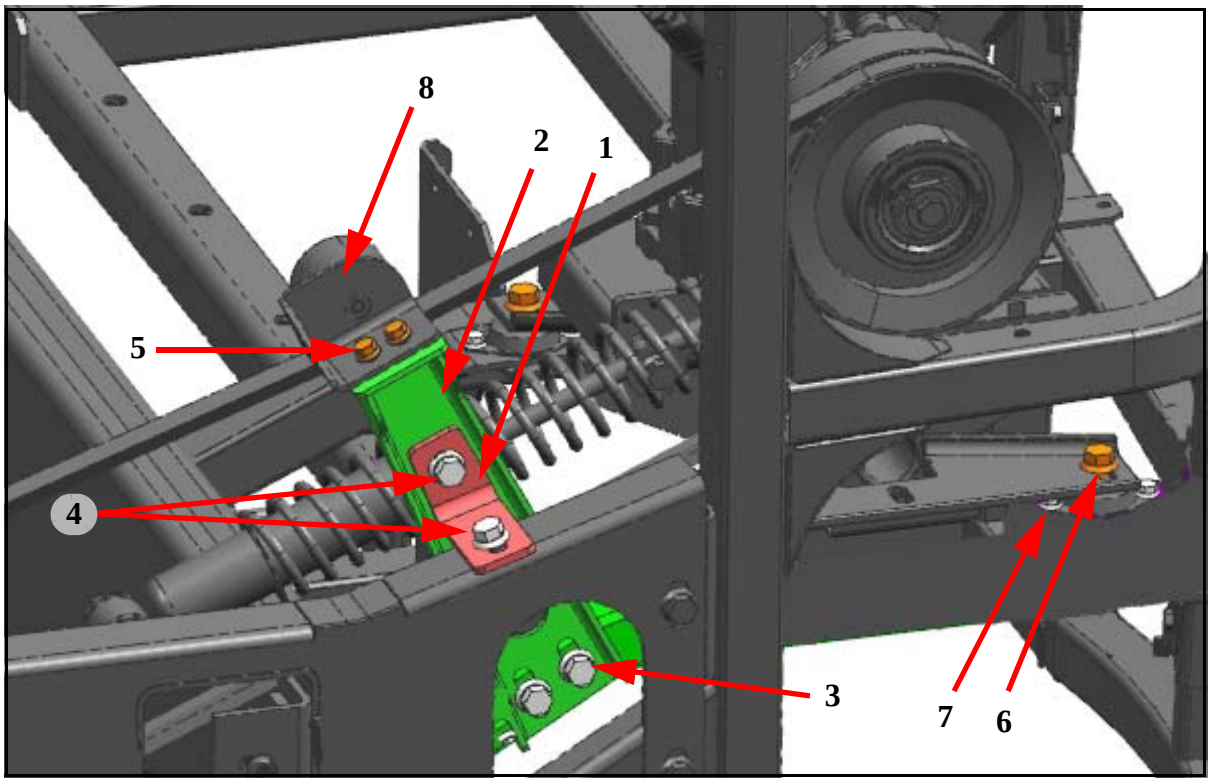

Figure 33. Idler pulley bracket angle and snubber bracket installation.

Item	Figure 33 Description
1	Angle, idler pulley bracket
2	Snubber bracket
3	Snubber bracket capscrew, p/n 19-01-1526 and flange nut, p/n 19-03-0497. Torque to 77-93 ft.-lbs
4	Angle capscrew, p/n 19-01-1577 and flange nut, p/n 19-03-0497. Torque to 77-93 ft.-lbs
5	Idler pulley capscrew, p/n 19-01-1570 and lock nut,19-03-0535. Torque to 43-47 ft.-lbs
6	Compressor stabilizer, ref p/n's 19-01-1529, 19-03-0497. Torque to 63-77 ft.-lbs
7	Stabilizer to brackets, ref p/n's 19-01-1532, 19-03-0498. Torque to 14-16 ft.-lbs
8	Idler pulley

72. Orient and re-install the A/C belt. Using a measuring tape and a straight edge, visually check to ensure a 3/8 belt deflection is achieved.

NOTICE

If a 3/8 inch belt deflection is NOT achieved, proceed to Step 73.

Only utilize a quantity of shims (one to three) that achieves a 3/8 inch belt deflection.

73. Remove the capscrew, p/n 19-01-1570 and lock nut,19-03-0535 mounting the idler pulley to the snubber bracket. Orient and position the required quantity of shims, p/n 08-27-1324, between the idler pulley bracket and the snubber bracket (refer to Figure 34).
74. Orient and install new capscrews, p/n 19-01-1736, through the idler pulley holes and the shim(s). Install the locknuts, p/n 19-03-0535, on the capscrews. Torque to 43-47 ft-lbs.

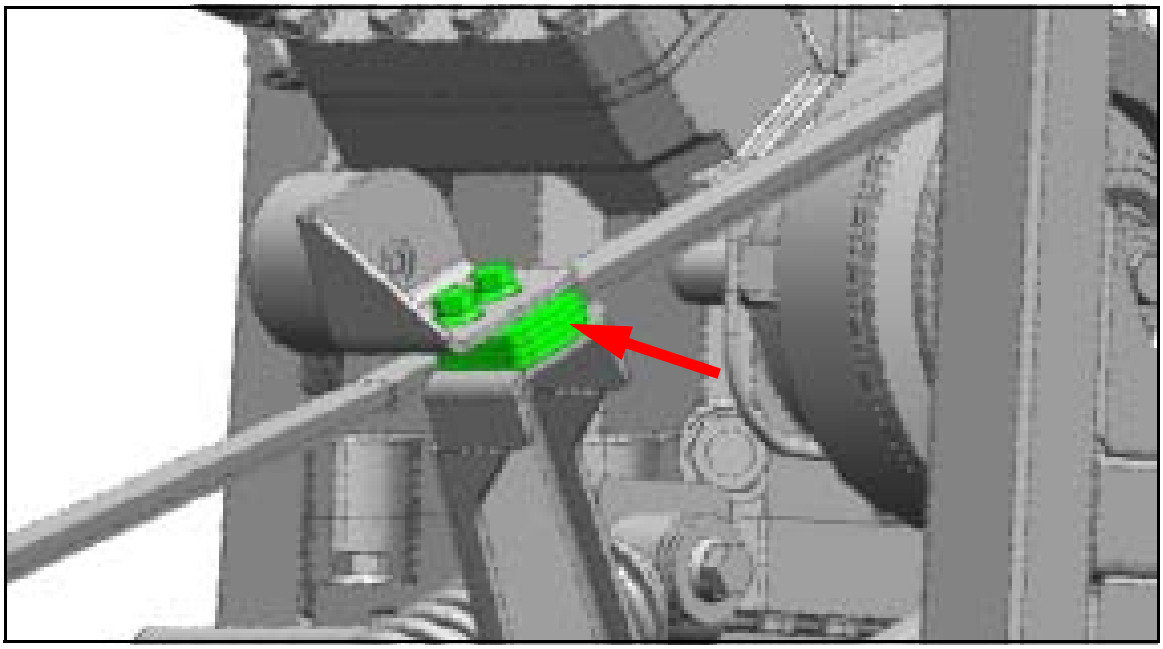

Figure 34. Addition of shim(s) to achieve a 3/8 inch belt deflection.

NOTICE

The compressor base may require forward or aft positioning to achieve proper belt alignment.

75. Using a laser tool or straight edge, check to ensure that belt alignment is 0.25 degree or 0.05 inch per foot of belt span.
76. Adjust the idler pulley to be centered to the belt.
77. Adjust the lower snubber to achieve a 1/4 inch gap to the belt.
78. Re-orient the A/C belt tensioner, following the labeled ends, back to the installation area. Using the existing mounting hardware, secure in position. Torque capscrews to 77-93 ft-lbs. Carefully remove the ratchet strap.

79. Re-orient the secondary (lower) lavatory tank back to the installation area.
80. Orient and re-connect the linkage positioned underneath the secondary (lower) lavatory tank shown in Figure 26.
81. Orient the lavatory strap support to the secondary (lower) lavatory tank and use the existing capscrew to secure in position and tight against the frame (refer to Figure 27). Torque the capscrew to 20-23 ft-lbs.
82. Orient and re-connect the hose clamp to the elbow on the dump tube assembly (refer to Figure 25). Tighten the hose clamp to secure installation.
83. Orient and re-connect vent hose to the tank (refer to Figure 25).
84. Orient and re-connect the engine power cable to the junction block on the secondary (lower) lavatory tank as shown in Figure 25. Shield with the red protective cover.
85. Using the existing hardware, orient and mount the tie bar plate to the coach frame (refer to Figure 24). Torque capscrews to 100-104 ft-lbs. Apply torque seal to the capscrew heads.
86. Lift and orient the bumper to the rear frame. Push down on the bumper to secure in position. Visually inspect to ensure that the side bumper brackets are orientated.
87. Install the bumper mounting hardware hand tight. Visually inspect the bumper for proper alignment. Open and close the engine compartment door to ensure no interference. Adjust bumper as required.
88. Align the side bumpers to follow the fender edge. Tighten the two (2) bolts to secure position. Torque to 18-22 ft-lbs. (refer to Figure 35). Repeat to the opposite side of the coach.
89. Torque the six (6) center bolts to 100-123 ft-lbs. (refer to Figure 35).
90. Using the existing hardware, orient and mount the radiator closing panel strip assembly and ground cable shown in Figure 21.

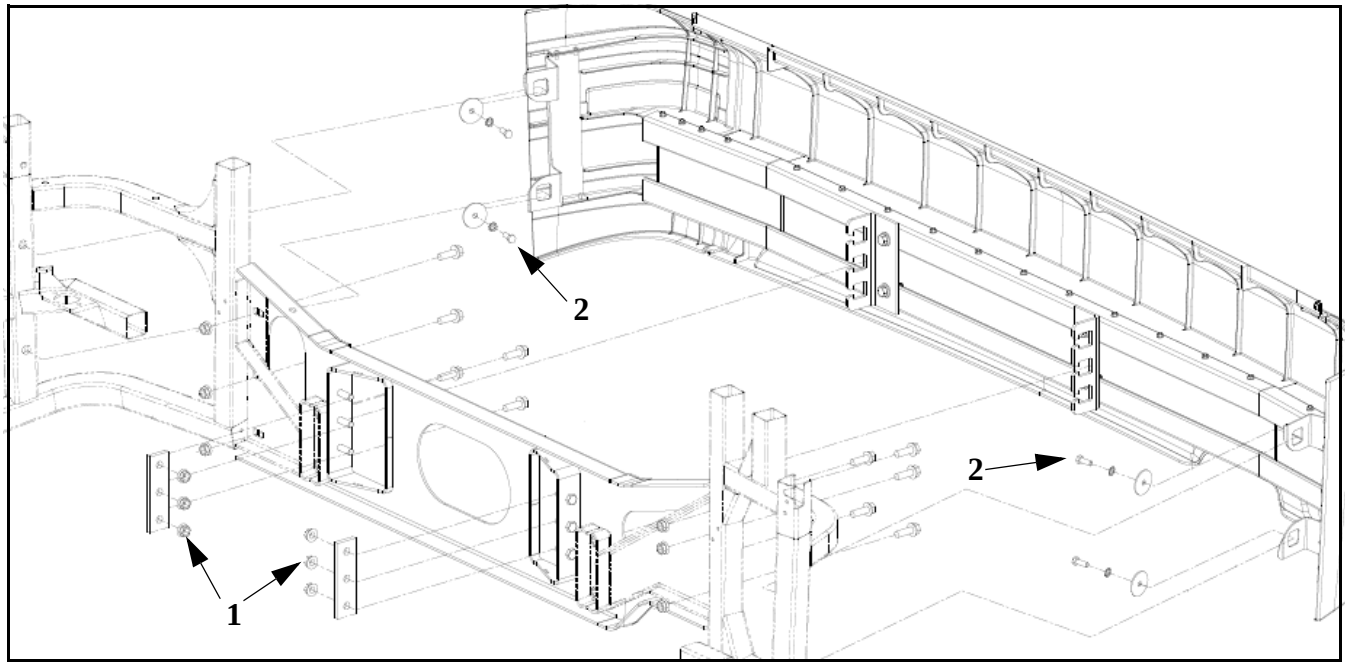

Figure 35. Bumper installation to coach frame.

Item	Figure 35 Description
1	Torque six (6) nuts to 100-123 ft.-lbs.
2	Torque four (4) bolts to 18-22 ft.-lbs

91. Re-orient the A/C compressor pivot plate into position. Using the existing mounting hardware, re-install the A/C compressor pivot plate as shown in Figure 36.

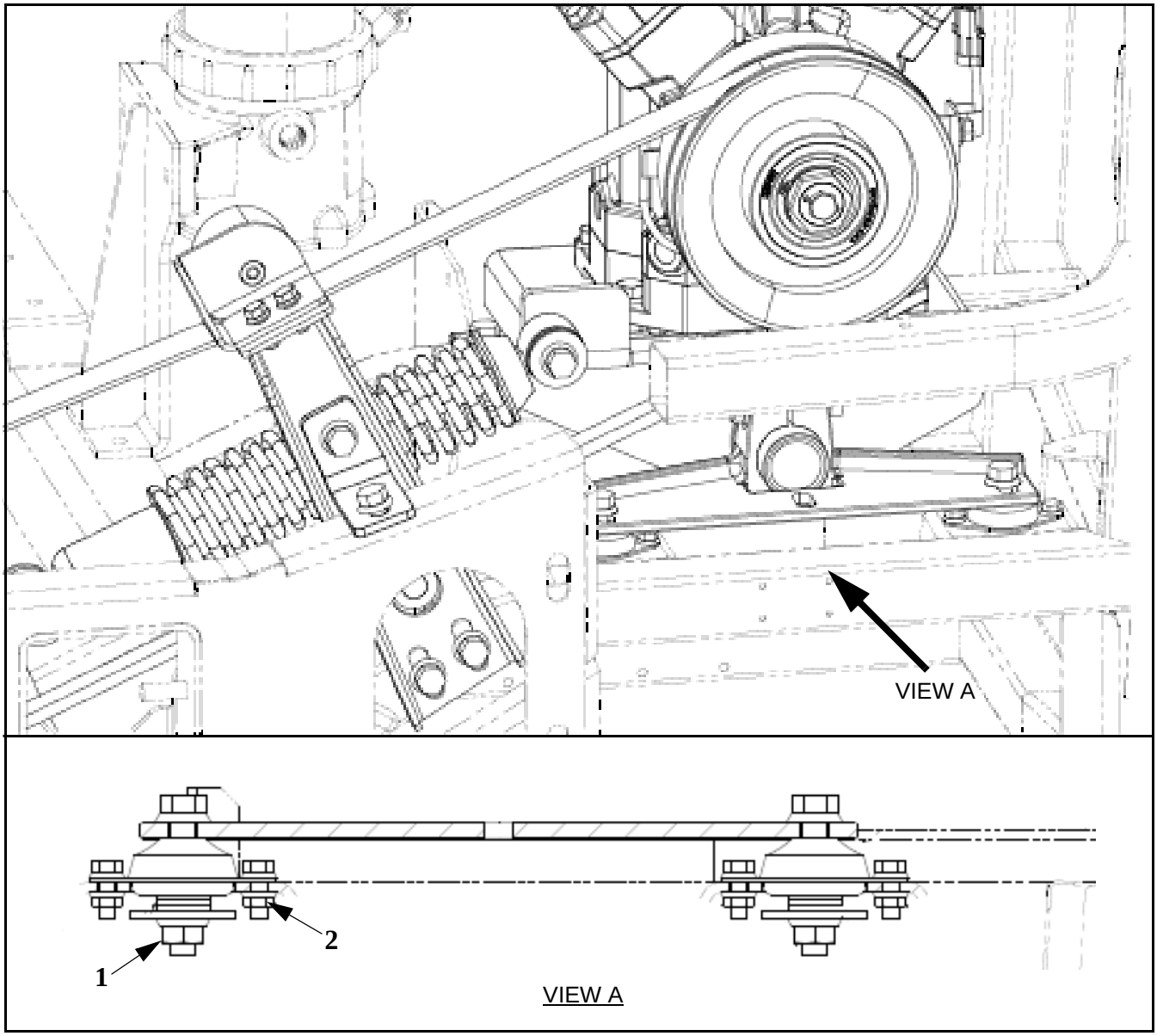

Figure 36. A/C compressor pivot plate installation.

Item	Figure 36 Description
1	Torque two (2) nuts to 63-77 ft.-lbs.
2	Torque four (4) nuts to 14-16 ft.-lbs

92. Perform the weld reconnect procedure listed on Page 39.

Broken Air Compressor Support Tube Procedure Complete.

WELDING PROCEDURE (AS REQUIRED UPON INSPECTION)

⚠CAUTION

The following information must be read before beginning any welding. The prohibitions and requirements must be followed to prevent personal injury and damage to electrical components. Also follow any welding instructions and cautions associated with the specific component being repaired.

Welding may only be performed by an experienced and qualified person. All welding must conform to AWS D1.1 Structural Welding Code - Steel. All applicable instructions and prohibitions must be followed.

Position ground contacts and barriers as close as possible to the weld area to protect components (wiring, brake lines, hydraulic lines, etc.) from heat, contact by weld splatter, and arcing.

PRE-WELDING DISCONNECTION

Introduction

The following steps must be followed before performing any welding activities on the coach:

- Ensure the area is safe for hot work activities.
- Follow the disconnect procedure outlined in later sections to prevent damage to the coach harnesses and electrical components.
- Avoid welding in close proximity to any of the electronic modules or harnesses.
- If welding needs to be performed close to the electronic modules or harnesses, these should be protected by using a fire blanket or heat-resistant material.

PROCEDURE

1. Switch the main battery disconnect to the off position.

⚠CAUTION

Disconnect the following in order.

Battery Compartment

2. All ground connections
3. All battery terminals
4. Battery equalizer
5. Battery charger (if applicable)

Rear Junction Box/Baggage Bay #3

6. All connectors on the multiplex modules
7. All connectors from the HVAC controller
8. All connectors from the transmission ECU
9. All connectors from the engine CPC module
10. All connectors from the ABS ECU

11. All connectors from the MDSS ECU
12. Inverter (if applicable)
13. All grounds on the PWR distribution board

Engine Compartment

14. Engine ECU connector
15. Aux heater
16. All OEM recommended connectors on the engine

Front Junction Box

17. All dash connectors
18. All connections for electronic components
19. All grounds on the PWR distribution board
20. All connectors on the multiplex modules

POST-WELDING CONNECTION

WARNING

To prevent personal injury, exercise extreme caution at power-up.

WARNING

Warn persons in immediate area before powering on main disconnect switch.

1. When welding is complete, reconnect all items in the ***exact reverse order*** from disconnection. **Reconnection order is critical to safety.**
2. Connect welding ground cable close as possible to work area.
3. Verify all connections are complete and secure.
4. Warn all personnel in the area that the power is going to be switched on.
5. Ensure all personnel are clear of the immediate area.
6. Switch the main battery disconnect ON.
7. Perform a systems check and test drive before returning the coach to regular service.

Mail or fax the completed limited warranty claim form and verification form to MCI's warranty department, or photocopy and mail to:

MCI Fleet Support
Attn: Warranty Department
7001 Universal Coach Drive
Louisville, KY 40258
Fax Number 1-800-360-8886

to receive credit for the hours used to complete this task. Contact the MCI Fleet Support Technical Center at 1-800-241-2947 for any further information.

Field Change Program Conditions:

The parts required for this change will be supplied without charge.

A labor allowance of 1.6 hours will be granted for performing Steps 1 to 13 in this bulletin on applicable J4500 Model coaches.

A labor allowance of 12.8 hours will be granted for performing Steps 1 to 4 and 14 to 53 in this bulletin on applicable J4500 Model coaches

A labor allowance of 15.5 hours will be granted for performing Steps 1 to 4 and 54 to 92 in this bulletin on applicable J4500 Model coaches

This labor allowance will be credited to your MCI Fleet Support Parts Account on receipt of the attached "MCI Field Change Program Verification Form" and a "Warranty Claim Form" as detailed in your Owner Warranty manual to MCI's Warranty department. A "MCI Field Change Program Verification Form" needs to be submitted for each VIN affected. Photocopy the attached "MCI Field Change Program Verification Form" as required for the number of affected coaches in your fleet.

This program will end on December 29, 2017.

Motor Coach apologizes for any inconvenience resulting from this campaign, but urges you to implement this change as soon as possible.

Sincerely,

Motor Coach Industries

Reliability Driven™

MCI FIELD CHANGE PROGRAM (FCP) VERIFICATION

CONTACT INFORMATION

CUSTOMER NAME:

_____

(PLEASE PRINT

FCP INFORMATION – ONE FORM PER UNIT

FCP#: _____ **Coach Model _____** **Model Year _____**

COACH SERIAL #: (At least the last 5 digits)	**DATE COMPLETED ___ / ___ /___**
MILEAGE:	

IMPORTANT: TO RECEIVE CREDIT FOR ANY ALLOWABLE LABOR CHARGES, THIS VERIFICATION FORM MUST BE RETURNED TO MCI UPON COMPLETION OF THE FCP.

SUBMITTED BY: (Please Print)

_____ **DATE ___ / ___ /___**

TITLE: (Please Print) _____

SIGNATURE:

_____

COMMENTS:

FAX TO: 800-360-8886

MAILING ADDRESS:

MOTOR COACH INDUSTRIES
ATTN: WARRANTY DEPT.
7001 UNIVERSAL COACH DRIVE
LOUISVILLE, KY 40258

MCI part # 03-15-7738C