



INSTRUCTION TO SERVICE

ITS: 6704	
SECTION:	231 COOLING SYSTEM
WRITTEN BY:	Curtis Matthews
SUBJECT:	Interference of CAC Exhaust Support and Gen 5 Coolant Lines

ITS6704

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PROCEDURE:

ATTENTION: The goal is to have at least 0.5 inches of clearance between Gen 5 coolant lines and any part of the CAC clamp as shown in figure 1. First attempt to reach this goal by using **PART A** of this ITS. If 0.5 inches of clearance cannot be met with adjustments made in **PART A**, follow the procedure in **PART B** of this ITS.



Figure 1: Gen 5 coolant lines and CAC clamp clearance goal

PART A

1. Turn the main battery disconnect switch to the “OFF” position.
2. Open rear access panel to access engine compartment. See figure 2.

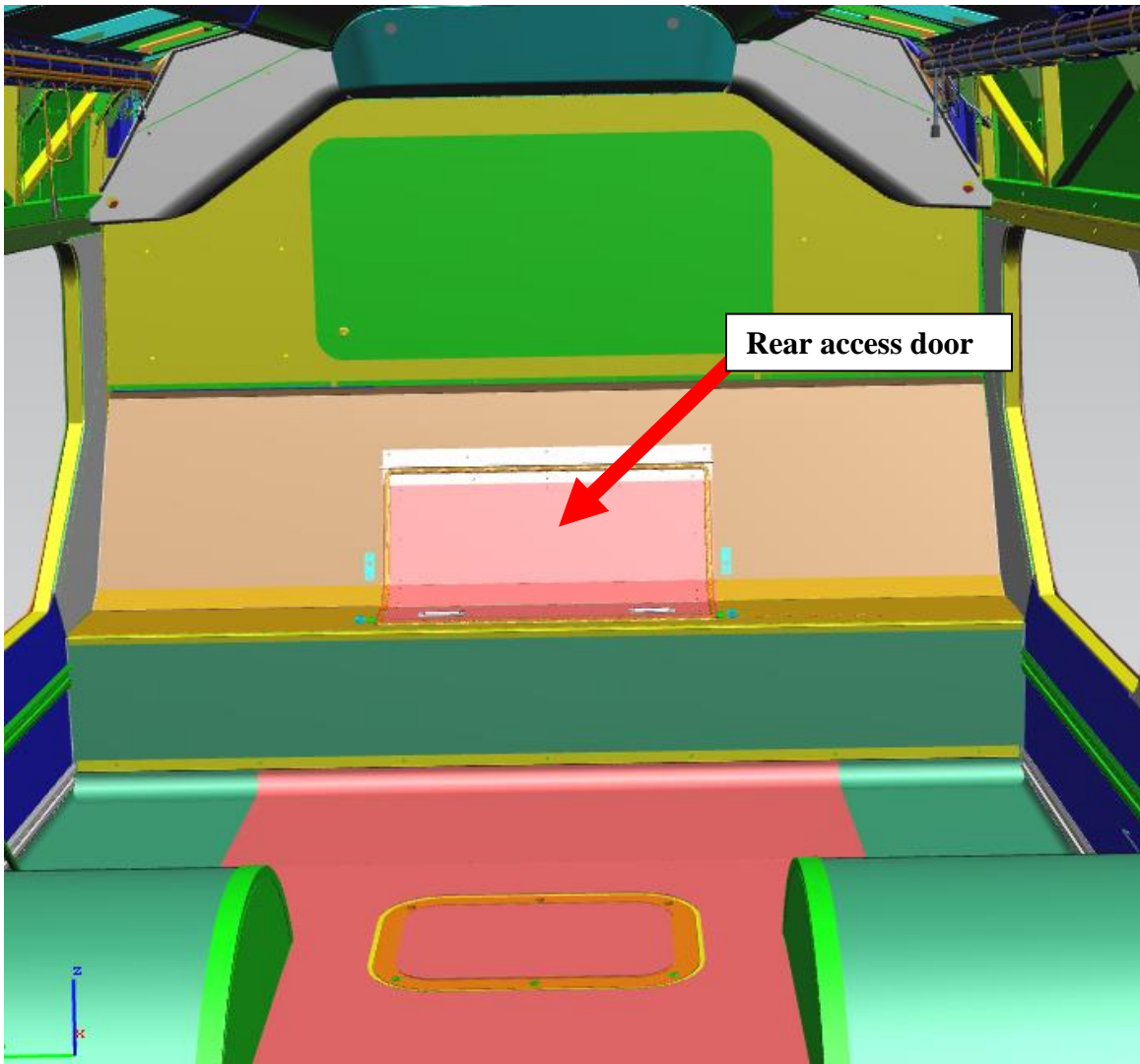


Figure 2: Rear interior of bus

3. Locate CAC tube bracket seen in figure 3.

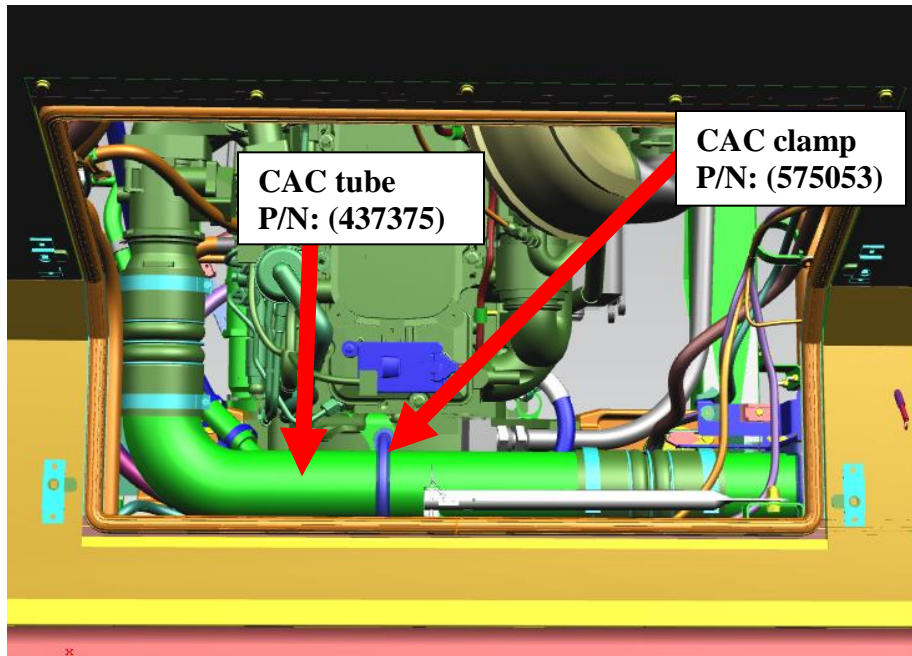


Figure 3: Birds eye view of rear interior access entry point

4. Adjust CAC bracket P/N: (498006) to its highest point by loosening 2 bolts and lifting bracket vertically until it reaches the bottom point of the slot. Figure 4 shows a CAC bracket clamp P/N: (575053) at its lowest point, and a yellow arrow indicates the direction of adjustment to be made.
5. Re-torque bolts to 57 ft-lbs (dry) as shown in figure 4.

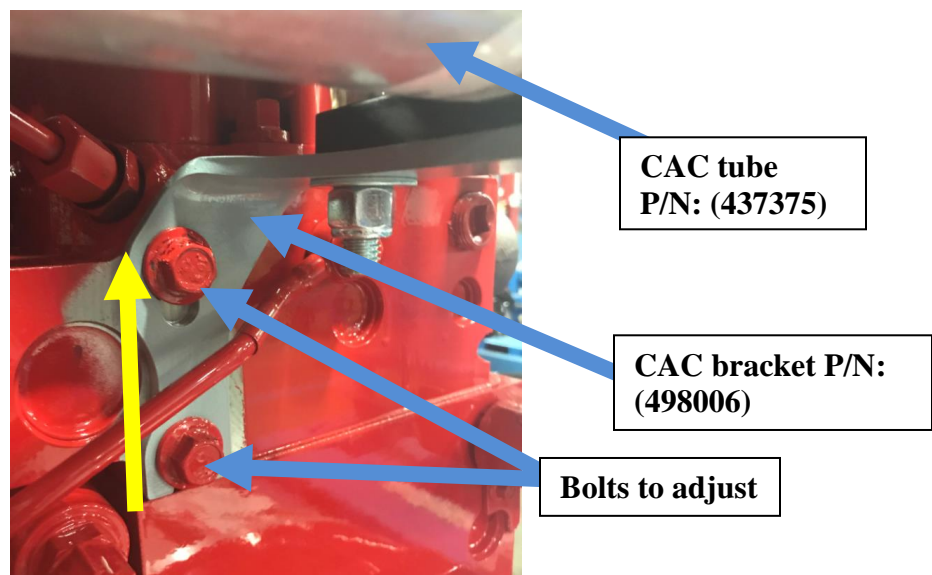


Figure 4: CAC bracket and CAC tube underside

PART B

1. Turn the main battery disconnect switch to the “OFF” position.
2. Open rear access panel to access engine compartment. See figure 5.

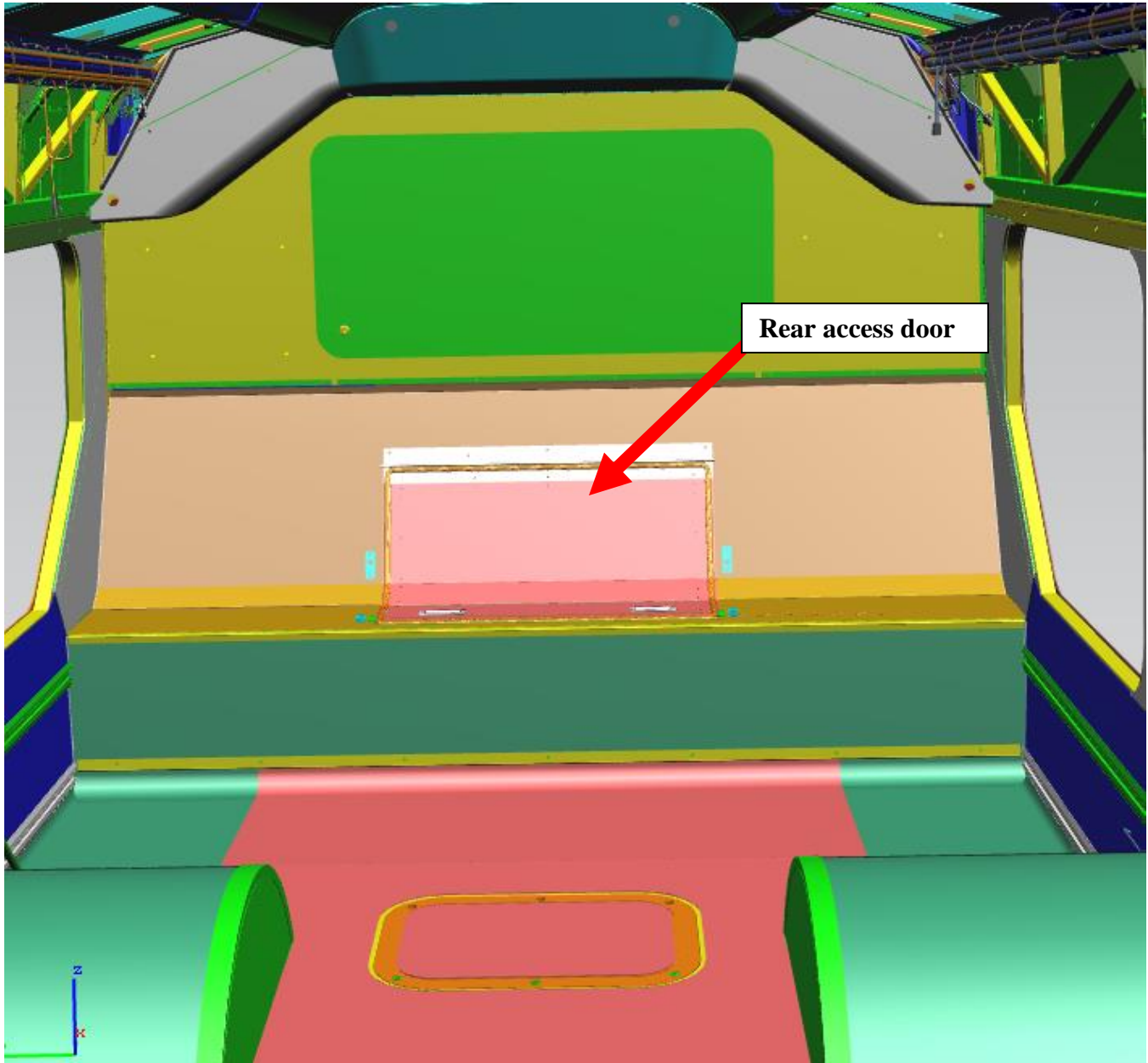


Figure 5: Rear interior of bus

3. Locate CAC tube.
 - a) Remove CAC clamp P/N: (575053).
 - b) Remove CAC tube P/N: (437375) at flex connector clamp points shown in figure 6.

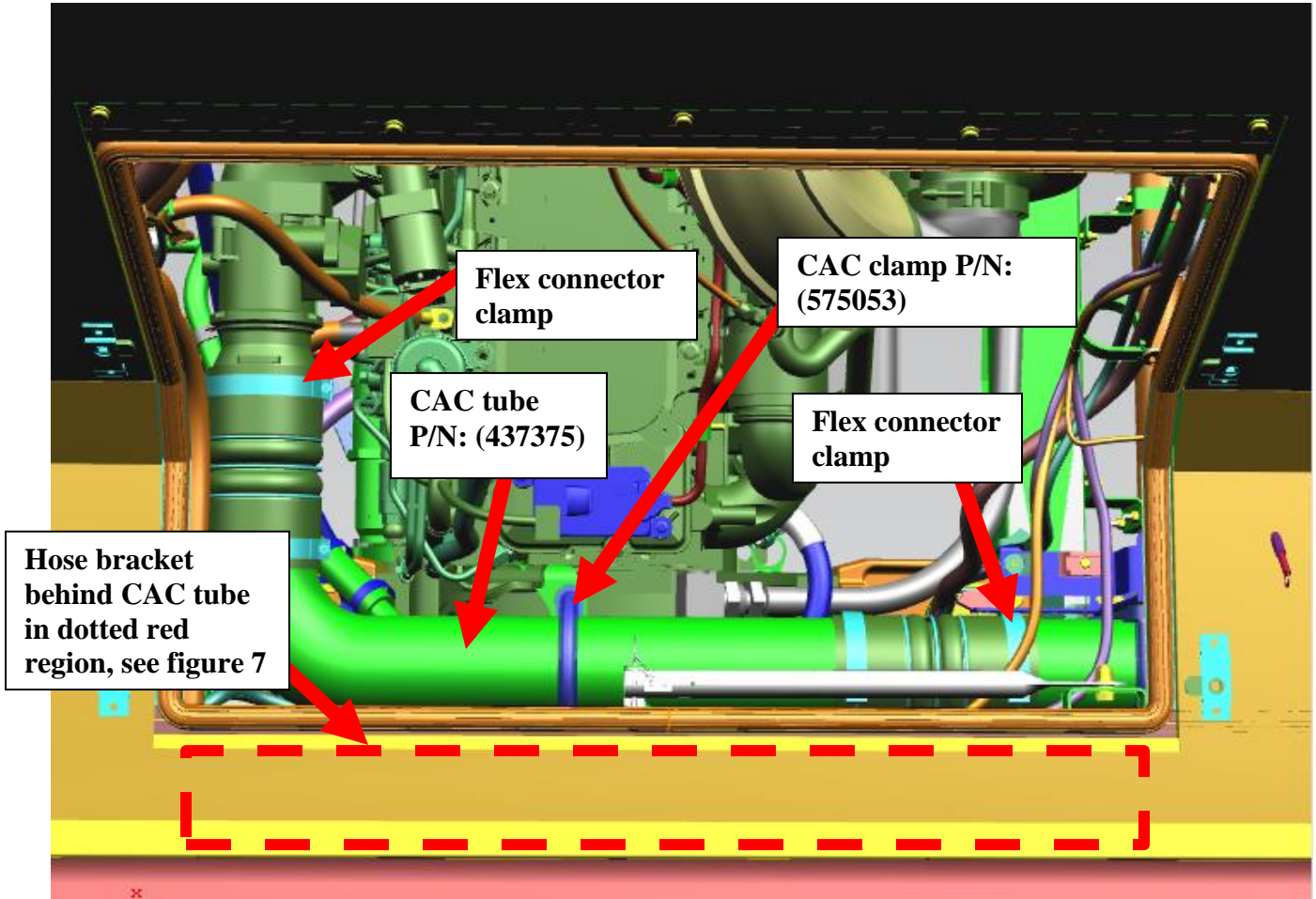


Figure 6: Birds eye view of rear interior access entry point

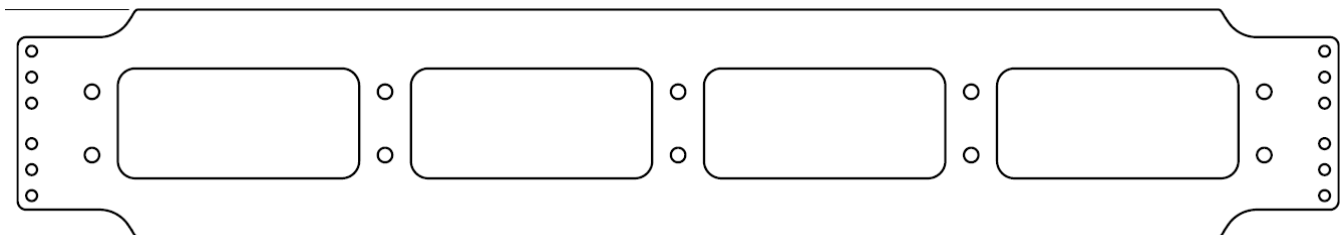


Figure 7: Hose bracket P/N: (437556)



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4. Remove hose/power cable clamps P/N: (393344) x3, and move coolant lines/rad fan power cables away from the hose bracket P/N: (437556) as seen in figure 8. See figure 7 for hose bracket appearance reference.

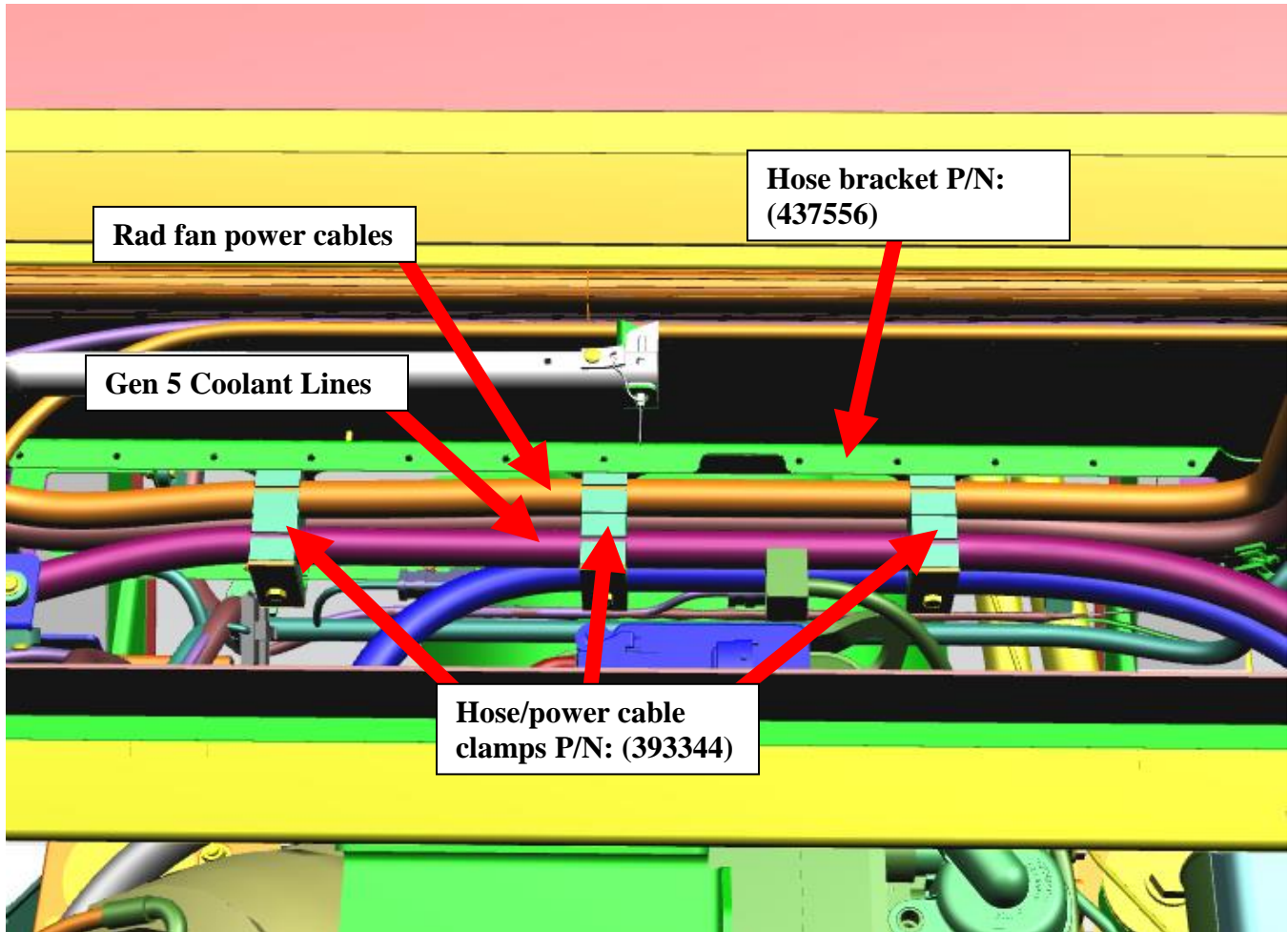


Figure 8: Coolant lines, rad fan power cables and hose bracket



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5. Reset hose bracket P/N: (437556). See figure 9 and 10.
 - a) Use the hose bracket P/N: (437556) as a template and drill 2 new holes through the first hole below the top screw on each side of the hose bracket P/N: (437556) with #7 drill bit.

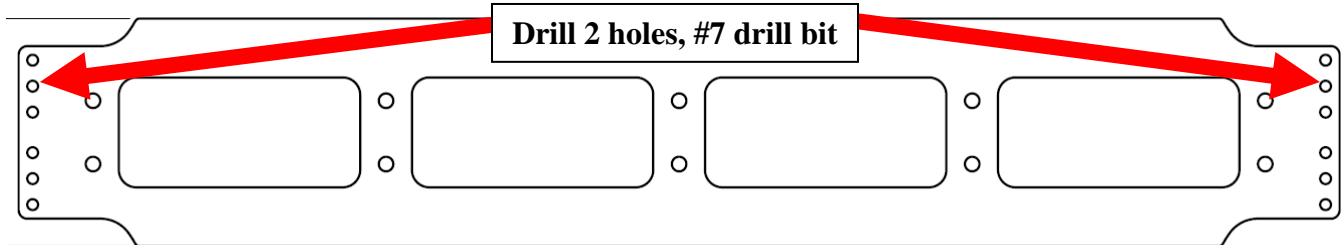


Figure 9: Hose bracket, drill 2 holes

- b) Remove top and bottom ¼-20 tapping screws x4 from hose bracket and discard.
- c) Make sure to keep tapping screw spacers x4.
- d) Lower the hose bracket P/N: (437556) 0.75 inch down from its original position so that the newly drilled holes line up with the top holes on the hose bracket P/N: (437556).

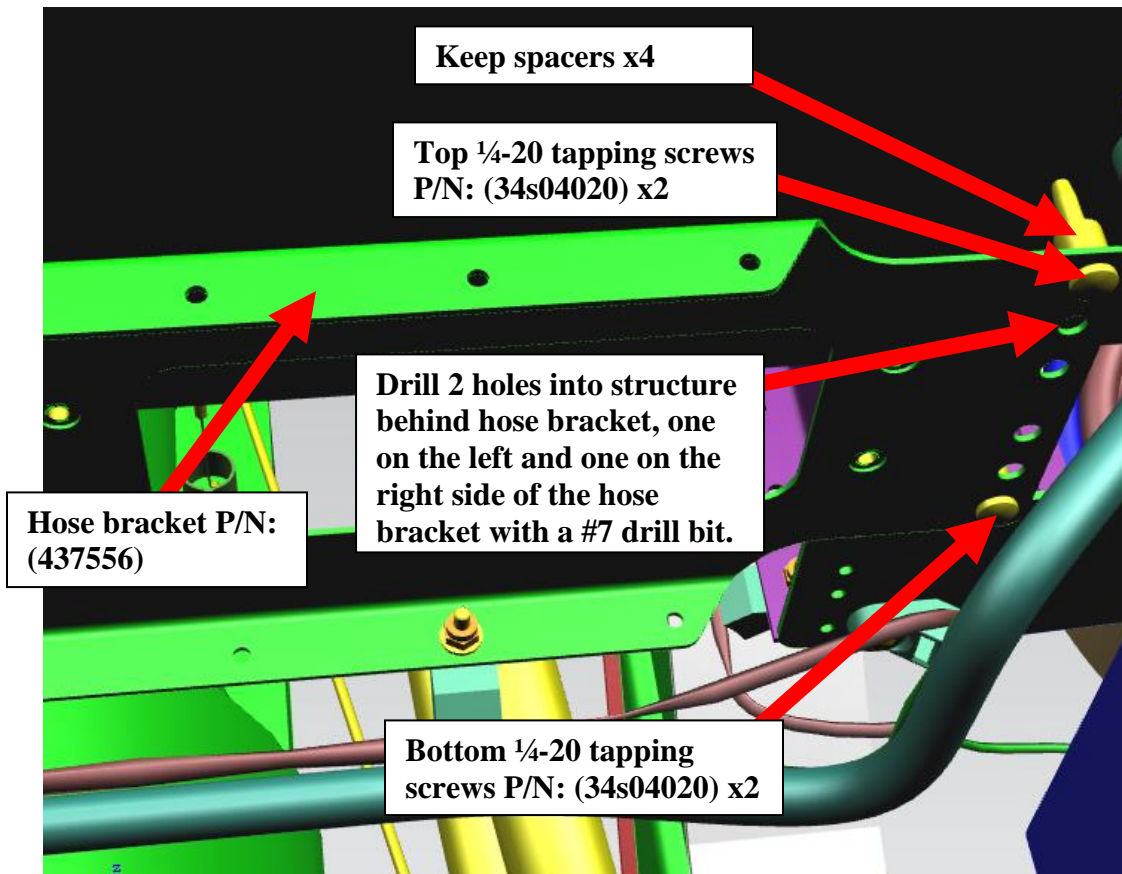


Figure 10: Hose bracket right side



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6. Install new ¼-20 tapping screws P/N: (34s04020) x4 into hose bracket P/N: (437556).
 - a) Install top ¼-20 tapping screws P/N: (34s04020) x2 into recently drilled holes using LOCTITE P/N: (081034). Be sure to add spacers kept from discarded tapping screws and installed in the same order they were originally. See figures 11 and 14.

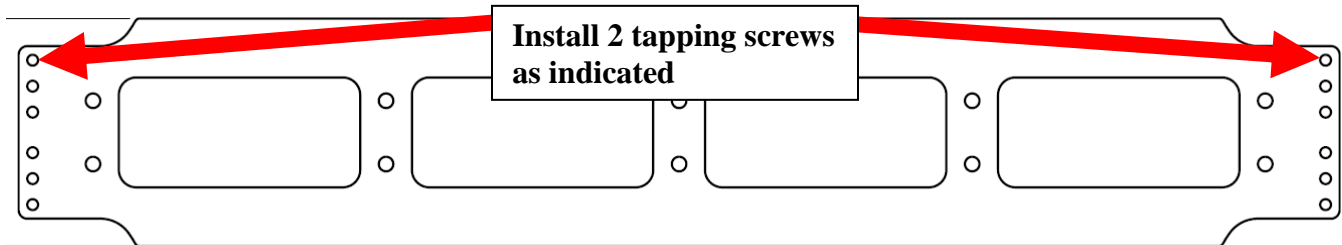


Figure 11: Hose bracket, install tapping screws

- b) Use the hose bracket P/N: (437556) as a template and drill 2 new holes through the bottom holes as indicated in figure 5 with a #7 drill bit. See figures 12 and 14.

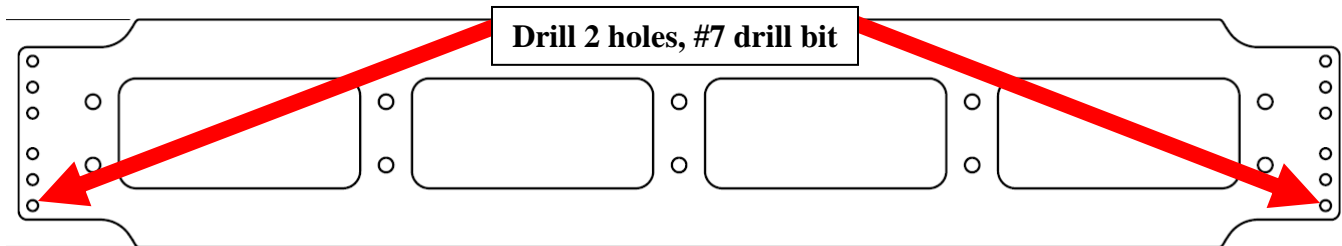


Figure 2: Hose bracket, drill 2 holes

- c) Install bottom ¼-20 tapping screws P/N: (34s04020) x2 into recently drilled holes using LOCTITE P/N: (081034). Be sure to add spacers kept from discarded tapping screws and installed in the same order they were originally. See figures 13 and 14.

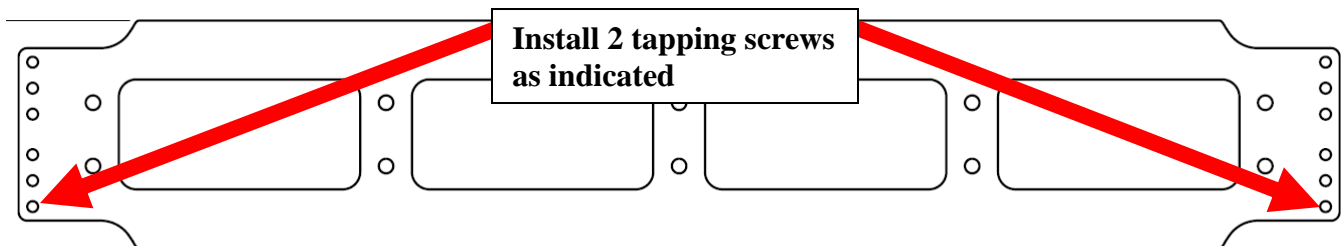


Figure 3: Hose bracket, install tapping screws

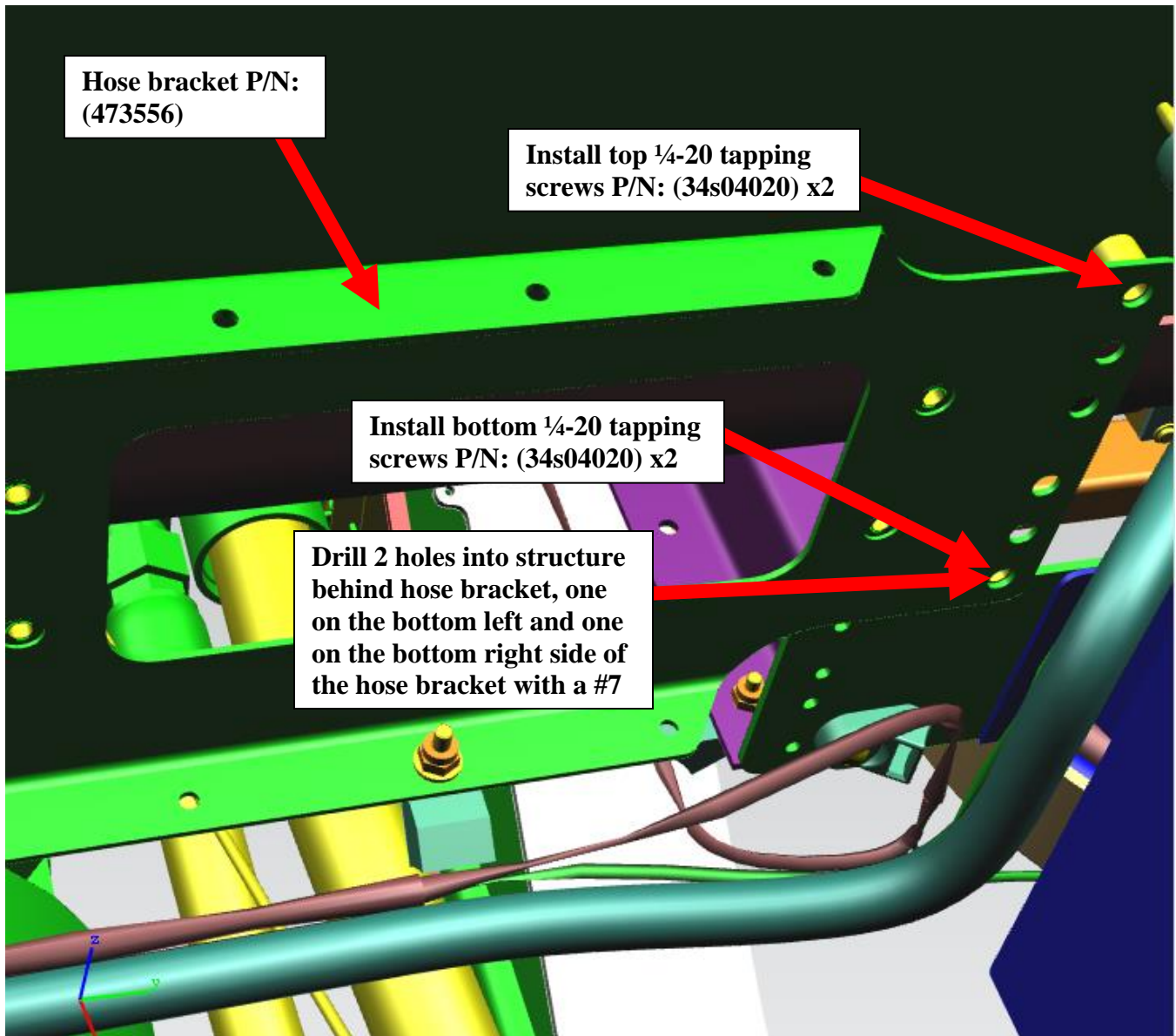


Figure 14: Hose bracket right side

7. Re-install, remove all tools and debris.
 - a) Reinstall hose/power cable clamps P/N: (393344) x3, refer to figure 3.
 - b) Reinstall CAC tube P/N: (473375) at flex connector clamp points, refer in figure 2.
 - c) Reinstall CAC bracket clamp P/N: (575053).



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LABOUR ESTIMATE

	Operation	Men	Hours	Labour Time M X HR
1	Raise CAC bracket	1	0.17	0.17
2	Lower hose bracket	1	1.0	1.0

PARTS REQUIRED

Item	Part Number	Description	Qty. per Coach	Units	Notes
1	34s04020	SCREW PH CROSS RECESS TPG TYPE F 1/4 20 UNC X 1 1/4 LG	4	EA	
2	081034	LOCTITE-243 MEDIUM 10ML	0.01	EA	