



## INSTRUCTION TO SERVICE

<b>ITS: 5316</b>	
<b>SECTION:</b>	219 Engine & Transmission
<b>WRITTEN BY:</b>	Michael Rooney
<b>SUBJECT:</b>	Engine Air Intake Tube Replacement.

# ITS5316

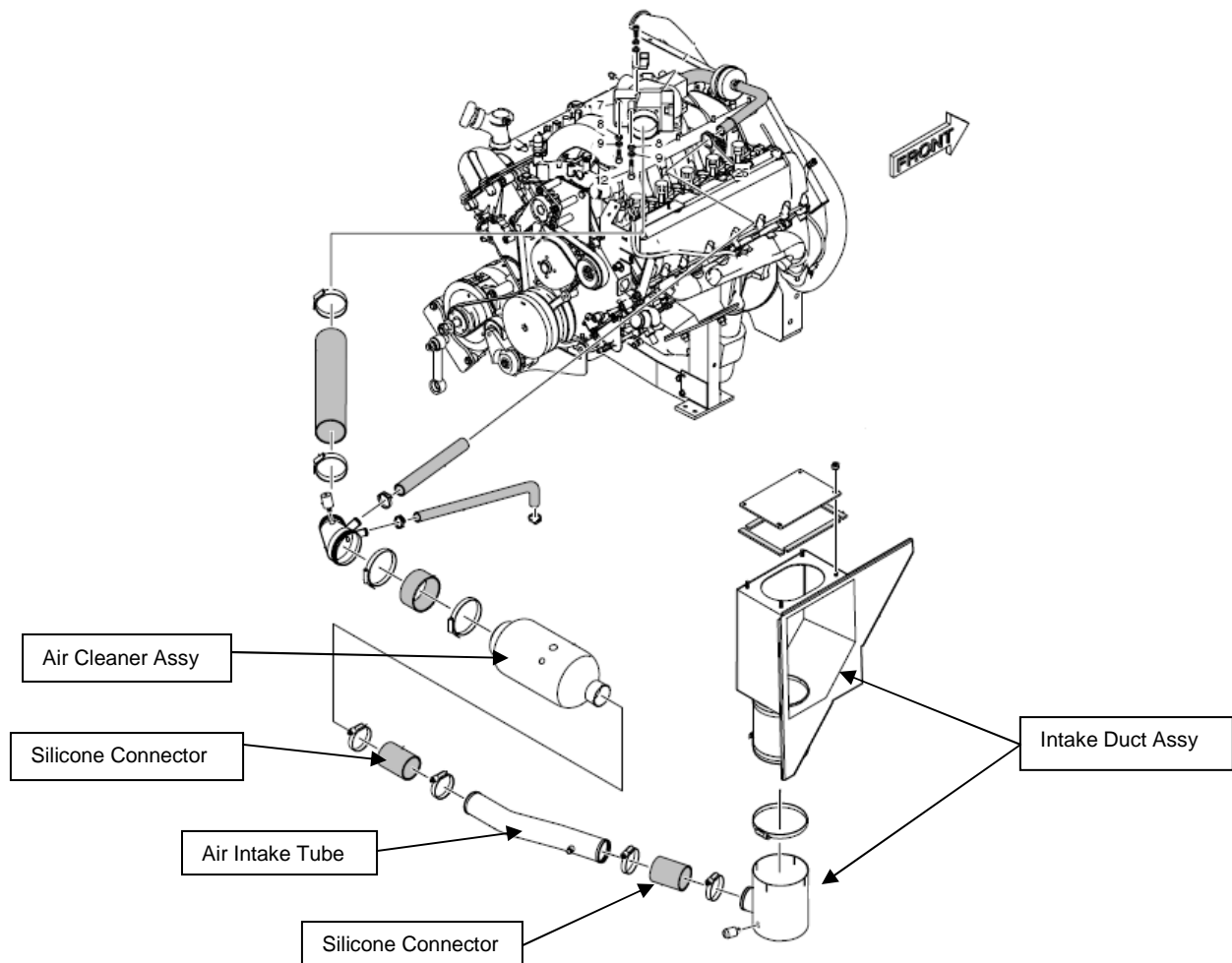
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**PROCEDURE:**

1. Turn the main battery disconnect switch to the “OFF” position.
2. Raise coach in accordance with the New Flyer Service Manual.

**⚠ WARNING:** ALWAYS discharge the Ultra Capacitors before performing maintenance on this vehicle. Refer to Section 5 of the service manual under 2.17 *Discharging the Ultra Capacitors* for the discharge procedure.

3. Open the rear engine compartment door and locate the engine air intake plumbing on the curbside of the central divider that separates the engine from the high voltage electrical hardware.
4. Remove the air intake tube and the two silicone connector hoses that join the intake tube to the air cleaner assembly and the intake duct assembly. Set the hose clamps aside.

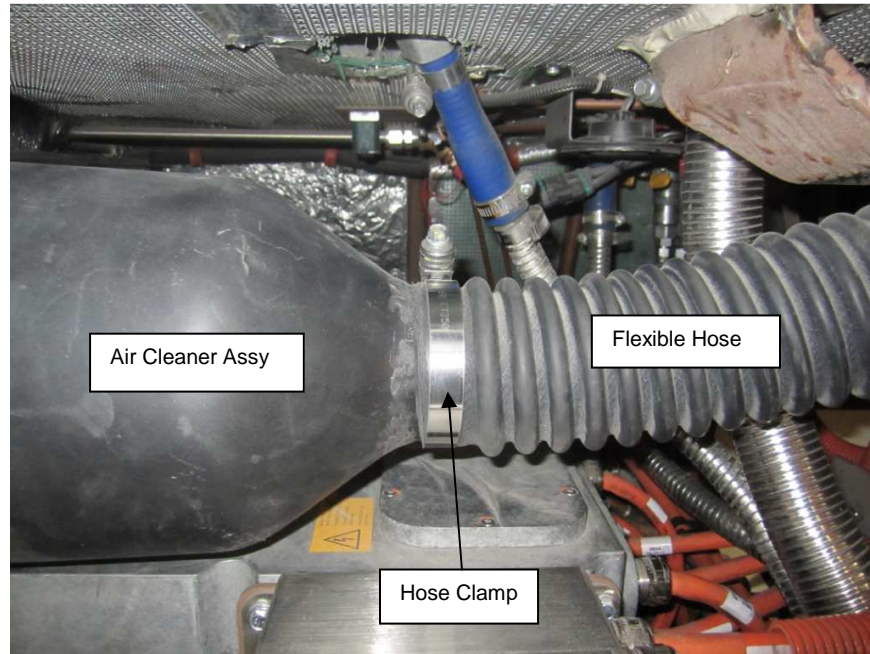


**Figure 1: Engine Air Intake System**

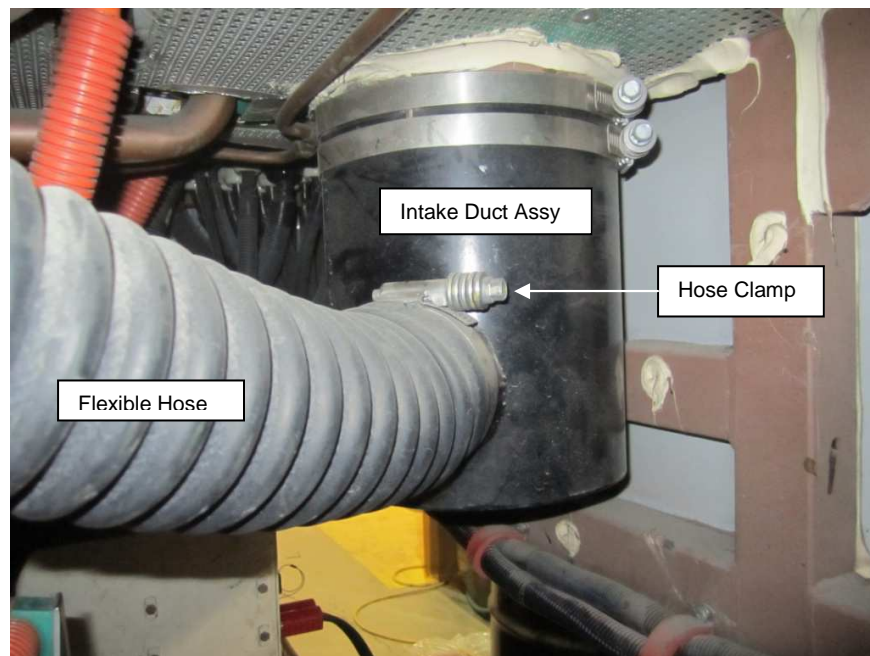


## NEW FLYER

5. Install bracket NF P/N 496547 on the frame stand-off located curb side of the engine strut mount using bolt NF P/N 10B06012 and washer NF P/N 10W06000. Torque to 48 FT-LBS. Figure 4.
6. Install flexible duct hose NF P/N 493929 between the air cleaner assembly and the intake duct assembly using two of the hose clamps removed in step #4. Torque hose clamps to 56-62 IN-LBS FT-LBS. Figure 2 & Figure 3.

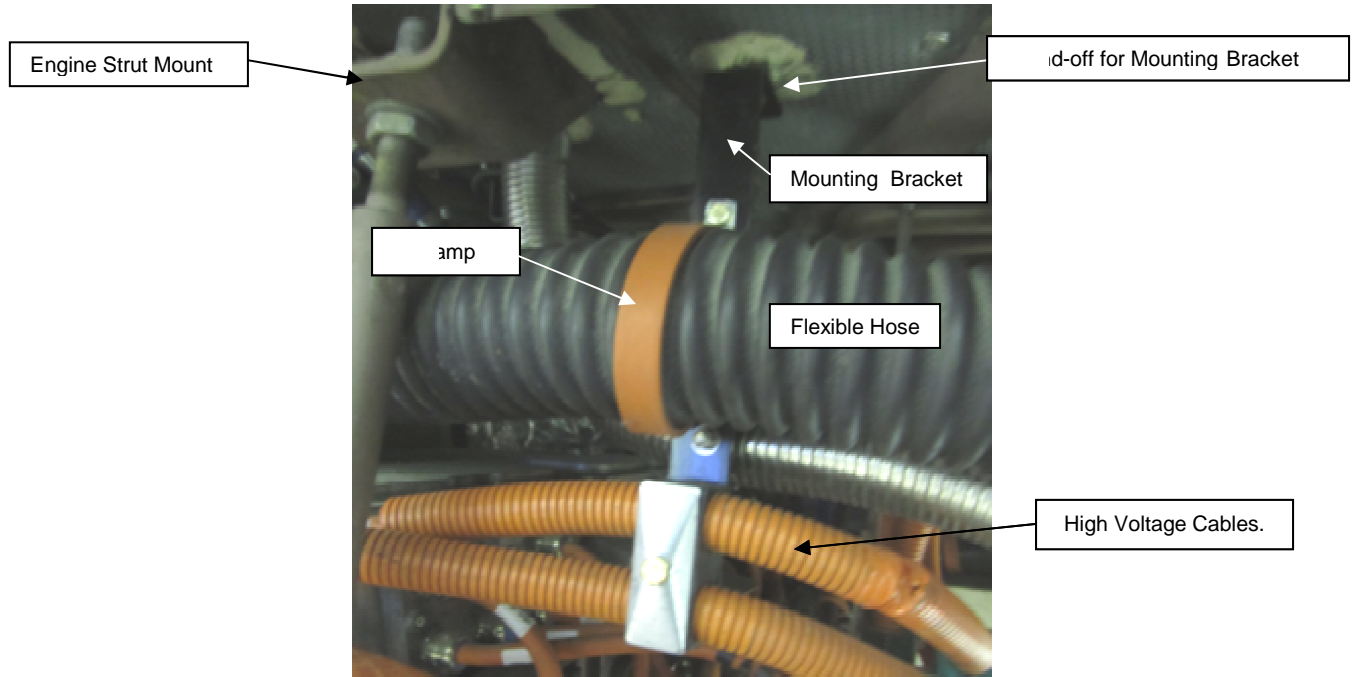


**Figure 2: Flexible Hose Attached to Air Cleaner Assembly**



**Figure 3: Flexible Hose Attached to Intake Duct Assembly**

7. Attach the P-Clamp NF P/N 092597 to the flexible hose and then bolt the p-clamp to the black bracket installed previously using screw NF P/N 15S00010, washer NF P/N 10W00000 and locknut NF P/N 41N00000. Torque hardware to 30 FT-LBS. Figure 4.



**Figure 4. Bracket, P-Clamp & Flexible Duct Assembly.**

8. Attach the orange high voltage cables to the bottom of the bracket. Figure 4.
9. Turn the main battery disconnect switch to the "ON" position.
10. Remove any tools & debris to return the coach to service condition.



**NEW FLYER**

### LABOUR ESTIMATE

	Operation	Men	Hours	Labour Time M X HR
1	Engine Air Intake Tube Replacement	1	0.5	0.5

### PARTS REQUIRED

Item	Part Number	Description	Qty. per Coach	Units	Notes
1	493929	DUCT-AIR INTAKE 3.0ID	2.75	FT	
2	496547	BRKT-AIR INTAKE SUPPORT	1	EA	
3	41N00000	LOCKNUT #10 32 UNF	1	EA	
4	092597	CLAMP-P 3.000	1	EA	
5	15S00010	SCREW PH CROSS RECESS SS #10 32 UNF X 5/8" LG.	1	EA	
6	10W00000	WASHER-FLAT #10 NOM	1	EA	
7	10W06000	WASHER FLAT 3/8 NOM	1	EA	
8	10B06012	BOLT-HEX 3/8 UNC X 0.75	1	EA	

### SPECIAL TOOLS REQUIRED

Item	Part Number	Description	Qty. per Coach	Units	Notes
		No Special Tools Required.			