

"DOCUMENT UNCONTROLLED IF PRINTED"

DOC #	PROCESS NAME	PAGE	REVISION	STATION	BY	DATE
AR883	Engine Cover (Doghouse) Repair	1	-	E	EH	4/7/21

Read process before beginning. If you do not understand any part please contact: Brad Fisher, Service Manager at 1-866-953-5555 or by e-mail at bfisher@ARBOCsv.com

Good Mechanics safety practice must be followed on any repairs.

Safety practices should include but not be limited to properly supporting the chassis, axles, blocking tires, and a work area free of clutter. Repair shops safety rules must be followed and safety equipment used. O.E.M. Battery and Auxiliary Battery MUST be disconnected.

Complaint: Heat escaping engine cover (doghouse) on Spirit of Freedom-Ford buses. (SOF-F)

Cause : Design

Correction: Modify engine cover (doghouse) and re-wire as instructed below.

Vehicles Affected: Spirit of Freedom-Ford

Labor Op code : 030501

Parts Return : No

Pre Auth Required: No

Tools Required:

Razor knife

2" Hole saw

Parts Required :

Qty of 10'	1400277-TAPE, A-P FOIL MFR# 2.5"UL 181 FOIL(60 yds per roll)
Qty of 2, 13" x 3" pcs	996572-STRIP, BACKER GALV STL .0127 X 3 X 79"
Qty 2 pcs 13" x 3"	2003827-INSULATION, 48" X 50' BULKHEAD POLY FOAM
Qty of 1 ft	1201778-SEAL, U-CHANNEL .57 X .37
Qty of 3	881753-CLAMP, CLOSED 1 1/4" VINYL COATED
Qty of 6	1098777-CABLE TIE, 11" BLACK

Repair Instruction

1. Remove switch cover and fire suppression controller. Shown circled below.



2. Unplug wire harness from HMI switches and label for reassembly. Carefully run them through holes without damaging connectors.



3. Remove engine cover and cup holder from chassis by unclipping the 4 clips.



4. Using hole saw, cut a 2 inch hole in the lower curbside cupholder storage area.



5. Cover hole with part 1201778, U-Channel Seal.

6. Using 2 -13"x3" pieces of 996572 Backer Strip, remove adhesive mylar and cover two holes on the outside of the engine cover.



7. Using 2-3"x 3" sections of part # 2003827, Bulkhead Insulation, remove adhesive mylar and insulate the inside of the holes and backer to stop heat transfer.



8. Cover the backer covered outside holes with heat tape.

9. Cover the inside holes of the engine cover insulation and bulkhead insulation with heat tape making it airtight.
10. Route wires through hole and connect to switches. Run additional harness above engine cover and zip tie in place.
11. Place the switch cover on the cup holder.
12. Place the cupholder on the engine cover and reattach the engine cover to the chassis.
13. Route and pclamp the wire harness along the engine cover on the floor. Be sure a harness is concealed under dash.