

Technical Service Note 32-04

SUBJECT: Airliner 21K RH Frame Reinforcements.

PRODUCTS: **Customer PODS** Airliner 21K high ride height rear suspension with 9/32" x 80KSI frame rails.

GROUP: 32

PROBLEM / SYMPTOMS: Due to possible overloading of the rear suspension frame failures can occur at the transverse torque rod mounting bracket located on the right hand side frame rail.

Production Action:

120KSI frame rails are being specified.

Field Action:

Reinforcement plates will be installed on the inside and outside of the right hand frame at the transverse torque rod mounting.

Parts Required:

<u>Part Number:</u>	<u>Description:</u>	<u>Quantity:</u>
23-09114-000	WASHER-HRDN,0.69X1.31X.177,ZN	24
23-13179-110	NUT-HEX,PT,5/8-11,C,ZC,.559	12
23-09444-225	SCREW-CAP,5/8-11X2.25GR8PO.403	8
23-09444-275	SCREW-CAP,5/8-11X2.75GR8PO.403	2
23-09444-525	SCREW-CAP,5/8-11X5.25GR8PO.403	1
23-09444-475	SCREW-CAP,5/8-11X4.75GR8PO.403	1
16-14540-000	PLT-BKG,A/L,6,28/90/23.9D344	1
16-14043-006	PLT-BKG,A/L,9,28/90/23.9D294	1

Work Instruction:

- 1) Park the vehicle on a level surface, Set the parking brake and chock the tires. Put the transmission in neutral. Build the air pressure to at least 100 psi. Set the Airliner rear suspension to its normal ride height. Shut down the engine.
- 2) Remove the rear suspension axle stop from the right hand frame rail.

- 3) Disconnect the transverse torque rod from the axle tower bracket.
Remove the transverse torque rod and bracket from inside of the right hand frame rail. Remove the existing reinforcement plate and discard.
- 4) Remove the fasteners that attach the right hand shock mounting bracket to the frame.
- 5) Thoroughly clean the inside and outside of the right hand frame rail between the air spring and suspension crossmember.
- 6) Position the inner reinforcement plate P/N 16-14540-000 on the inside of the right hand frame and align with the shock bracket mounting holes. Attach the shock mounting bracket and fasten to the frame and inner reinforcement plate using two 2" long 5/8" bolts nuts and washers. Hand tight only.
- 7) Position the outer reinforcement plate P/N 16-14043-006 on the outside of the right hand frame and align with the existing axle stop and transverse torque rod mounting holes. Fasten the outer reinforcement plate using the two upper most holes using two 2.25" long 5/8" bolts, nuts and washers. Hand tight only.
- 8) Attach the axle stop at the two lower mounting holes using two 2.75" long 5/8" bolts, nuts and washers. Hand tight only.
- 9) Attach the transverse torque rod and bracket using the 5.25" & 4.75" long 5/8" bolts, nuts and washers.
- 10) Torque the 5/8" fasteners from the nut side to 128 ft.-lbs.
- 11) From the inside of the frame rail back drill two holes using the inner reinforcement as a template. Reference Illustration 1 and 2.
- 12) From the outside of the frame rail back drill two holes using the outer reinforcement plate as a template. Reference Illustration 1 and 2.
- 13) Bolt up the four holes that were back drilled using 5/8" fasteners and torque 128 ft.-lbs.

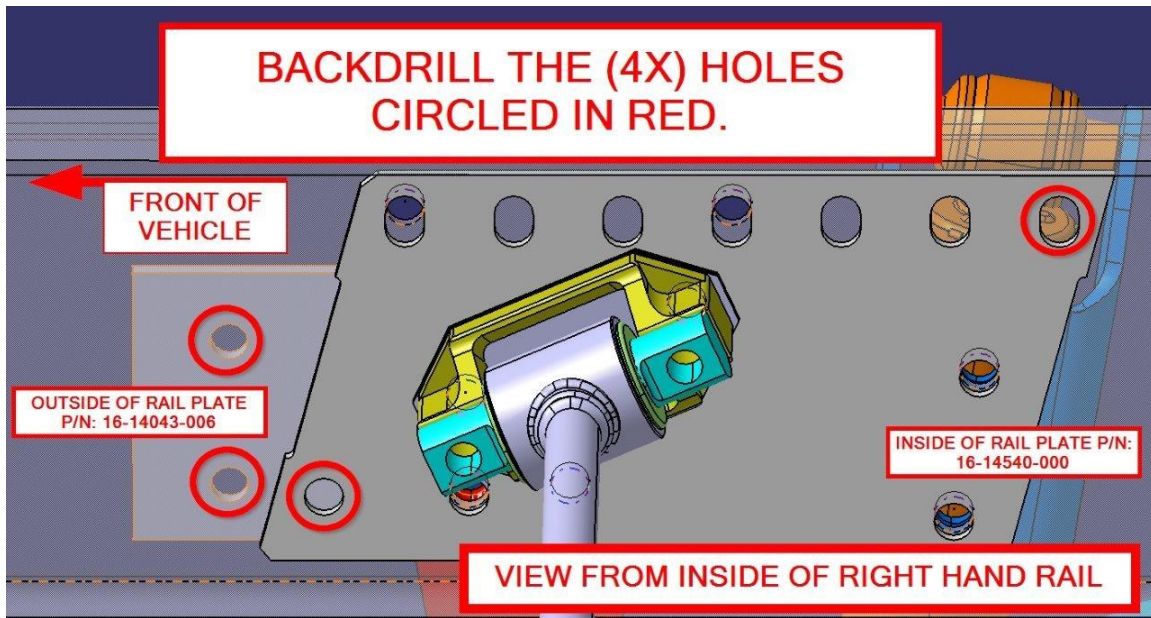


Illustration 1

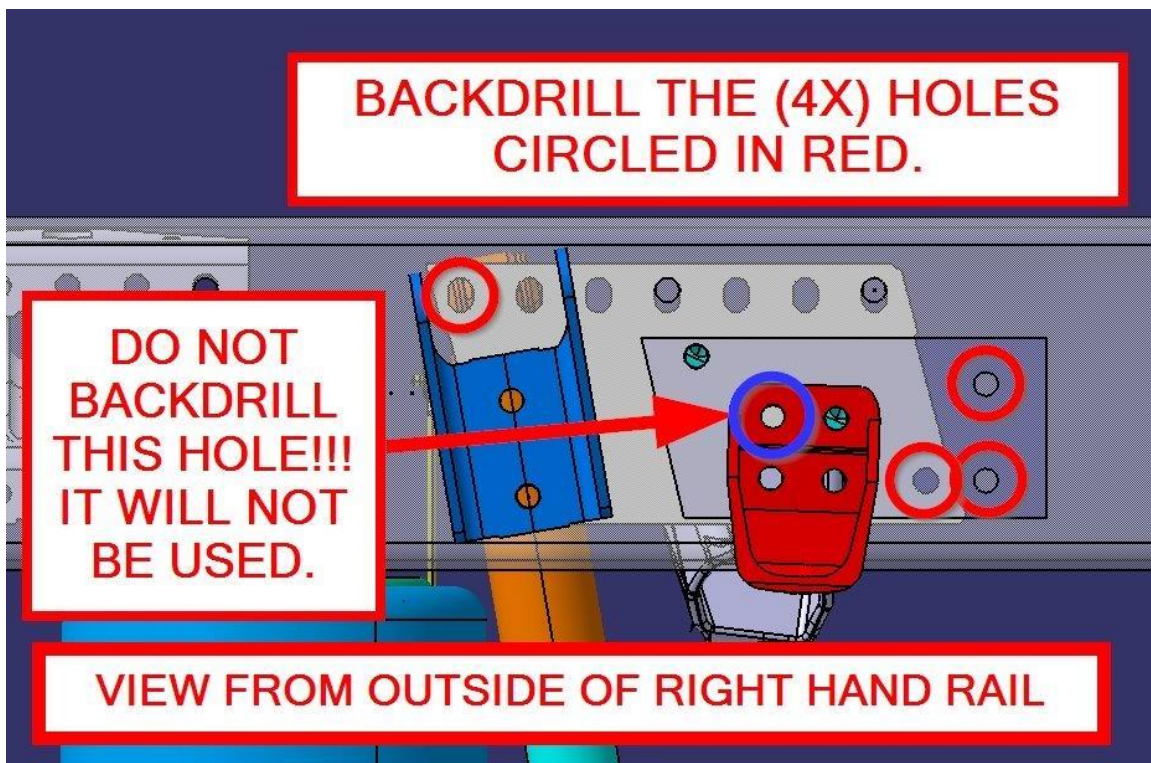


Illustration 2

Reference Documentation: FSPR: 24371

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