

CHECKING LANDING GEAR CROSSTUBE DEFLECTION

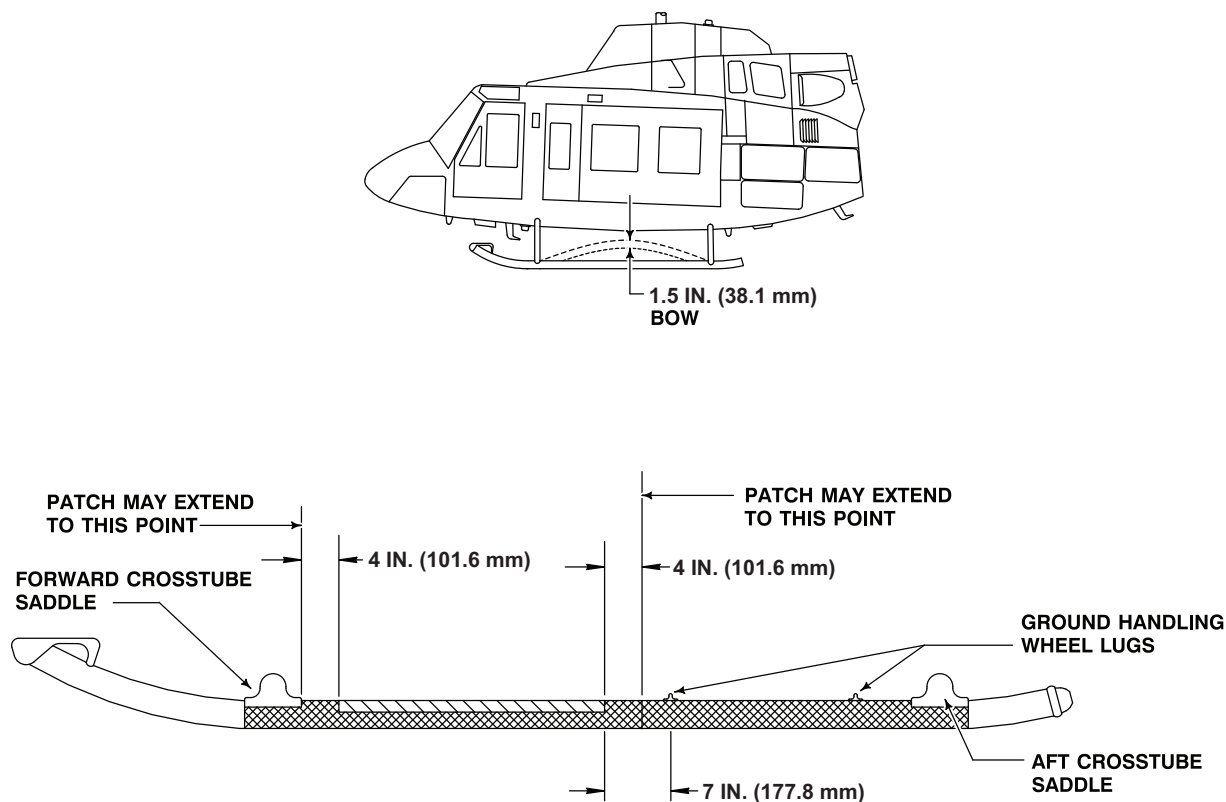
FORWARD/AFT CROSSTUBE

NOTES

1. Deformation (distortion) of either crosstube in excess of limits is cause for replacement of crosstube(s).
2. Crosstube may be deflected on one side only. If limit is exceeded, crosstube is considered scrapped and must be replaced.

212_MM_32_0002a

Figure 32-2. Landing Gear Assembly and Attaching Parts — Damage Limits (Sheet 1 of 9)



412-050-023-105/-106
 205-050-400-011/-012/-073/-074/-105/-106

DAMAGE LOCATION SYMBOLS



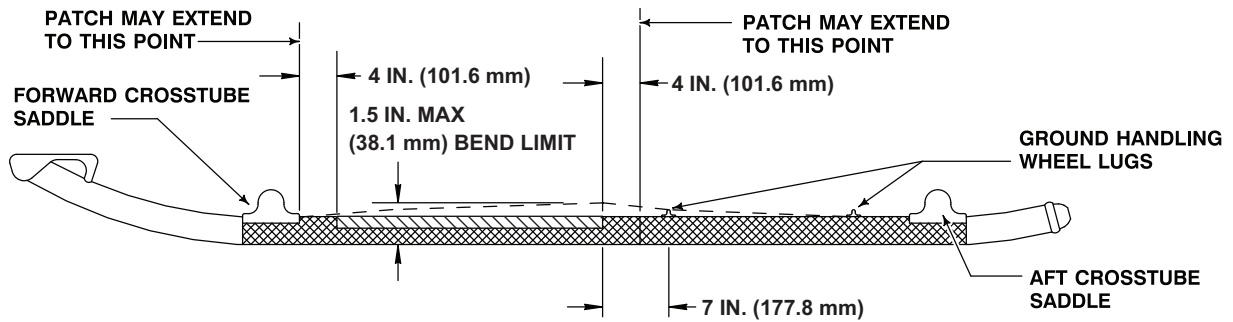
TYPE OF DAMAGE

MAXIMUM DEPTHS AND REPAIR AREAS ALLOWED

DENTS	No dents allowed. Replace as needed.	Repair damage up to 4.0 inches (101.6 mm) in diameter. Refer to paragraph 32-9.	Not critical.
HOLES	No holes allowed. Replace as needed.	Repair damage up to 4.0 inches (101.6 mm) in diameter. Refer to paragraph 32-9.	Not critical.
CRACKS	No cracks allowed. Replace as needed.	No cracks allowed. Replace as needed.	No cracks allowed. Replace as needed.

212_MM_32_0002b

Figure 32-2. Landing Gear Assembly and Attaching Parts — Damage Limits (Sheet 2 of 9)



412-050-030
412-050-034

DAMAGE LOCATION SYMBOLS



(Does not apply to saddles)

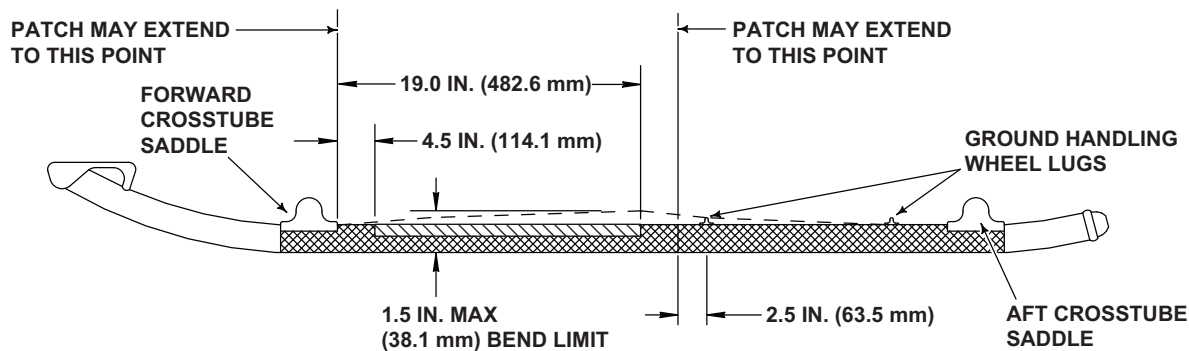
TYPE OF DAMAGE

MAXIMUM DEPTHS AND REPAIR AREAS ALLOWED

DENTS	Repair damage up to 3.0 inches (76.2 mm) in diameter.	No dents allowed. Replace as needed.	Not critical.
HOLES	Repair damage up to 3.0 inches (76.2 mm) in diameter.	No holes allowed. Replace as needed.	Not critical. Plug holes to keep out moisture.
CRACKS	No cracks allowed. Replace as needed.	No cracks allowed. Replace as needed.	No cracks allowed. Replace as needed.
SCRATCHES SCUFFS NICKS	<p>If damage is less than 0.03 inch (0.7 mm) deep and/or 1.25 inches (31.8 mm) length, no repair is needed.</p> <p>If damage is between 0.03 to 0.05 inch (0.8 to 1.2 mm) deep and/or 1.25 to 1.65 inches (31.8 to 41.9 mm) length, repair.</p> <p>If damage is greater than established limits, replace as needed.</p>	<p>If damage is less than 0.03 inch (0.7 mm) deep and/or 1.25 inches (31.8 mm) length, no repair is needed.</p> <p>If damage is between 0.03 to 0.05 inch (0.8 to 1.2 mm) deep and/or 1.25 to 1.65 inches (31.8 to 41.9 mm) length, repair.</p> <p>If damage is greater than established limits, replace as needed.</p>	Not critical.
CORROSION	No corrosion allowed. Corrosion cleanup limits are 0.05 inch (1.3 mm) depth and 1.65 inches (41.9 mm) length. Refer to paragraph 32-11.	No corrosion allowed. Corrosion cleanup limits are 0.05 inch (1.3 mm) depth and 1.65 inches (41.9 mm) length. Refer to paragraph 32-11.	No corrosion allowed. Corrosion cleanup is limited to 10% of material thickness. Refer to paragraph 32-11.

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Figure 32-2. Landing Gear Assembly and Attaching Parts — Damage Limits (Sheet 3 of 9)



AAI 412-320-119/-120/-123/-124

DAMAGE LOCATION SYMBOLS



(Does not apply to saddles)

TYPE OF DAMAGE

MAXIMUM DEPTHS AND REPAIR AREAS ALLOWED

DENTS	Repair damage up to 3.0 inches (76.2 mm) in diameter.	No dents allowed. Replace as needed.	Not critical.
HOLES	Repair damage up to 3.0 inches (76.2 mm) in diameter.	No holes allowed. Replace as needed.	Not critical. Plug holes to keep out moisture.
CRACKS	No cracks allowed. Replace as needed.	No cracks allowed. Replace as needed.	No cracks allowed. Replace as needed.
SCRATCHES SCUFFS NICKS	If damage is less than 0.03 inch (0.7 mm) deep and/or 1.25 inches (31.8 mm) length, no repair is needed. If damage is between 0.03 to 0.05 inch (0.8 to 1.2 mm) deep and/or 1.25 to 1.65 inches (31.8 to 41.9 mm) length, repair. If damage is greater than established limits, replace as needed.	If damage is less than 0.03 inch (0.7 mm) deep and/or 1.25 inches (31.8 mm) length, no repair is needed. If damage is between 0.03 to 0.05 inch (0.8 to 1.2 mm) deep and/or 1.25 to 1.65 inches (31.8 to 41.9 mm) length, repair. If damage is greater than established limits, replace as needed.	Not critical.
CORROSION	No corrosion allowed. Corrosion cleanup limits are 0.05 inch (1.3 mm) depth and 1.65 inches (41.9 mm) length. Refer to paragraph 32-11.	No corrosion allowed. Corrosion cleanup limits are 0.05 inch (1.3 mm) depth and 1.65 inches (41.9 mm) length. Refer to paragraph 32-11.	No corrosion allowed. Corrosion cleanup limits do not apply. Refer to paragraph 32-11.

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Figure 32-2. Landing Gear Assembly and Attaching Parts — Damage Limits (Sheet 4 of 9)

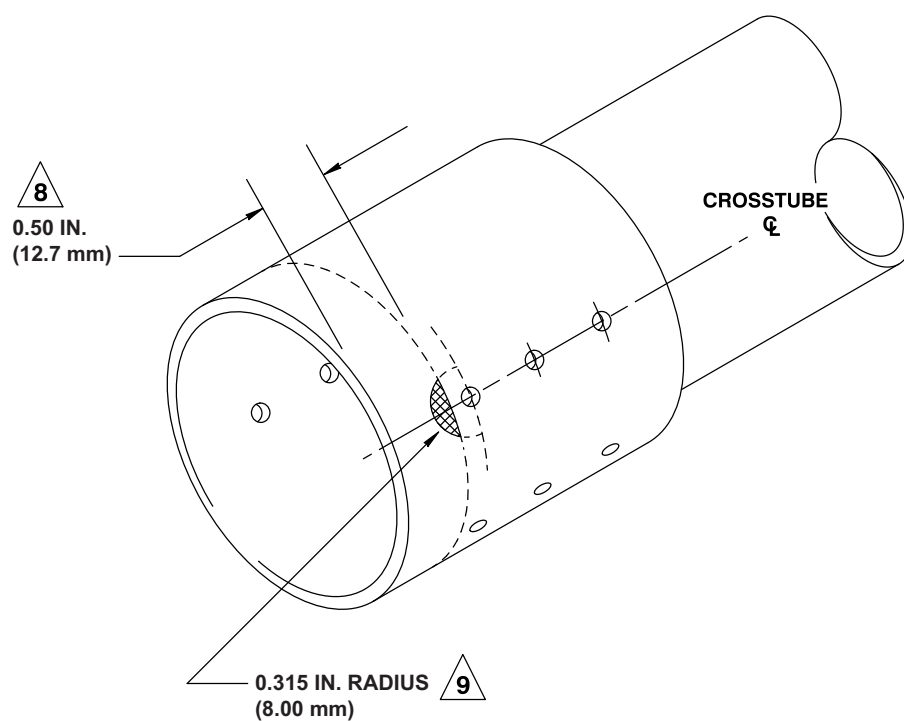
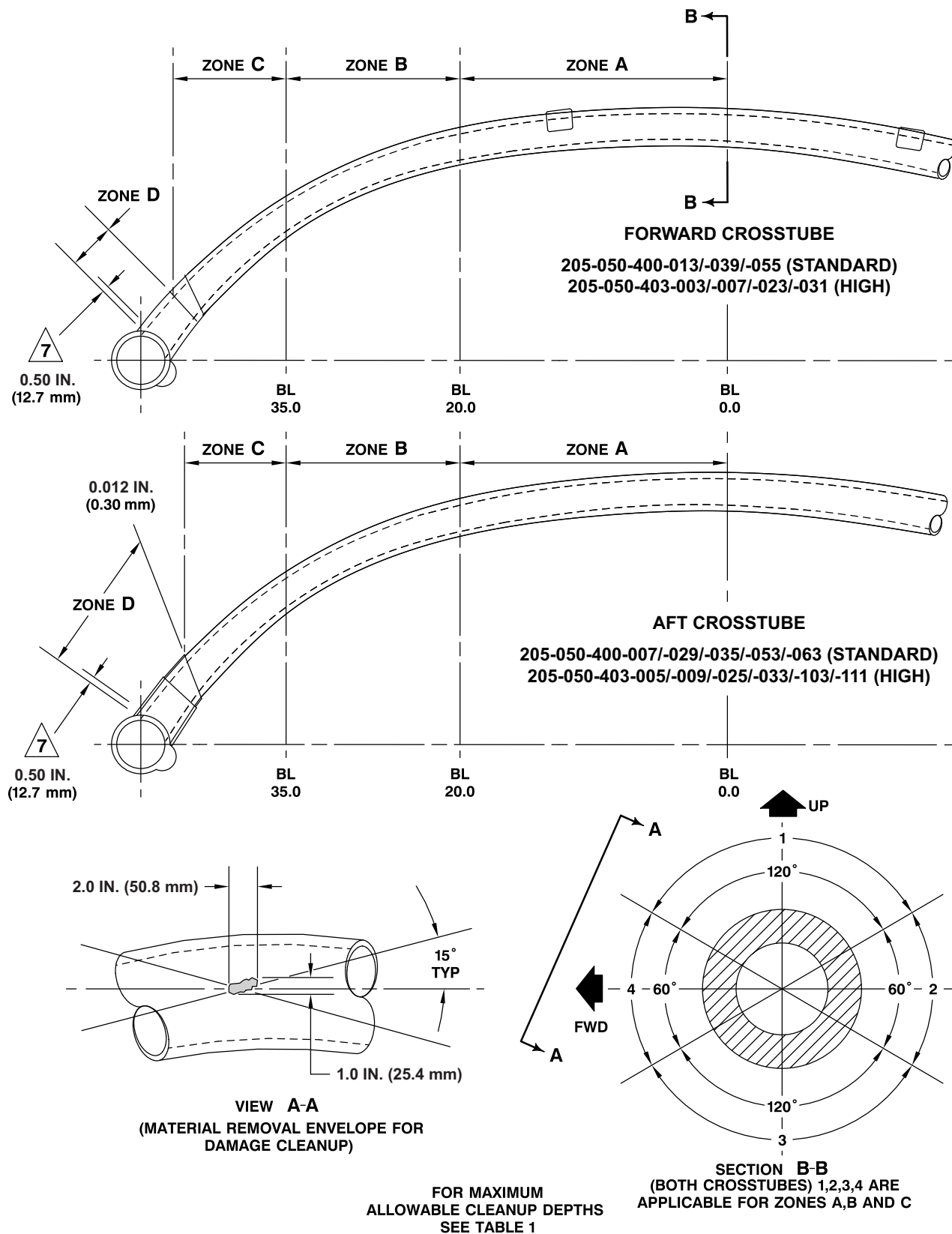


Figure 32-2. Landing Gear Assembly and Attaching Parts — Damage Limits (Sheet 5 of 9)




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212_MM_32_0002f


Figure 32-2. Landing Gear Assembly and Attaching Parts — Damage Limits (Sheet 6 of 9)


TABLE 1
MAXIMUM ALLOWABLE CLEANUP DEPTH - STANDARD AND HIGH SKID GEAR

ZONE	BHT PRODUCTS	BHT PRODUCTS
	FWD CROSSTUBE INCHES (mm) 	AFT CROSSTUBE INCHES (mm) 
A1	0.005 (0.13)	0.005 (0.12)
A2	0.015 (0.38)	0.015 (0.38)
A3	0.005 (0.13)	0.005 (0.12)
A4	0.015 (0.38)	0.015 (0.38)
B1	0.015 (0.38)	0.015 (0.38)
B2	0.015 (0.38)	0.015 (0.38)
B3	0.015 (0.38)	0.015 (0.38)
B4	0.015 (0.38)	0.015 (0.38)
C1	0.010 (0.25)	0.012 (0.30)
C2	0.010 (0.25)	0.012 (0.30)
C3	0.010 (0.25)	0.012 (0.30)
C4	0.010 (0.25)	0.012 (0.30)
D 	0.030 (0.76)	0.038 (0.96)


NOTES


- Except as otherwise stated, the information provided in Table 1 and the notes on this page are applicable to Figure 32-2, sheet 6. See Figure 32-2, sheet 6 for zone definition.
- All dimensions are in inches (except as noted).
- Repairs limited to one repair per “quadrant”, two at any cross section.
- Log location and depth of all repairs for each crosstube.
- Repair limits are lifetime accumulation at any location.
- Repair in Zone D not to impinge on more than one fastener hole.

 Allowable depth of repair is 0.050 inch (1.27 mm) for bottom 0.50 inch (12.7 mm) of area as indicated, except within 0.315 inch (8.00 mm) radius of center of any fastener hole. Otherwise, limits for Zone D are as shown in Table 1.

 0.050 inch (12.7 mm) maximum damage allowed on first 0.050 inch (12.7 mm) of crosstube except as indicated by Note  (Figure 32-2, sheet 5).

 Maximum allowable damage in shaded area is determined in Zone D inspection limits (Figure 32-2, sheet 5).

 Forward standard crosstube (BHT 205-050-400-013/-039/-055).
Forward high crosstube (BHT 205-050-403-003/-007/-023/-031).

 Aft standard crosstube (BHT 205-050-400-007/-029/-035/-053/-063).
Aft high crosstube (BHT 205-050-403-005/-009/-025/-033/-103/-111).

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Figure 32-2. Landing Gear Assembly and Attaching Parts — Damage Limits (Sheet 7 of 9)

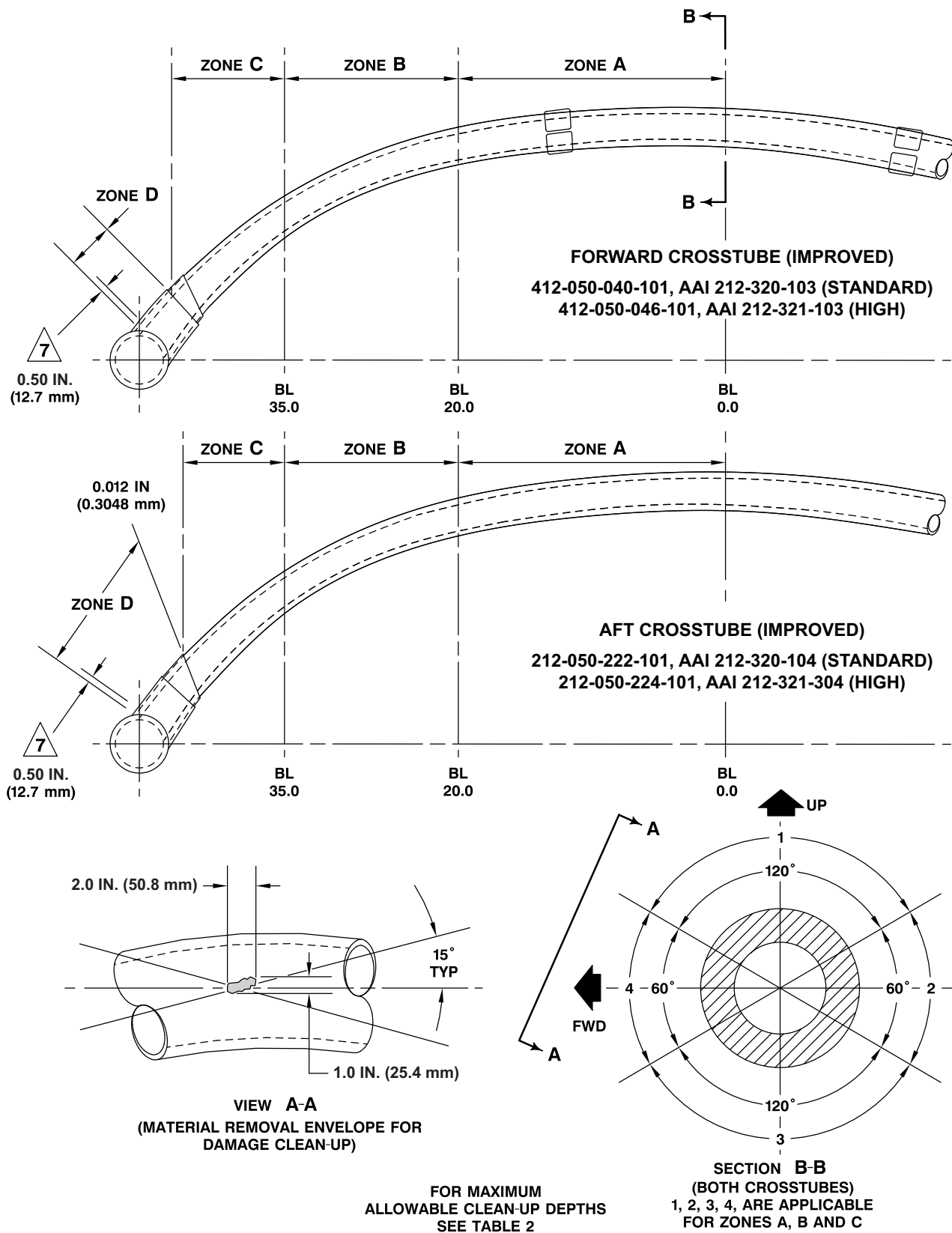






Figure 32-2. Landing Gear Assembly and Attaching Parts — Damage Limits (Sheet 8 of 9)



TABLE 2
MAXIMUM ALLOWABLE CLEANUP DEPTH - IMPROVED STANDARD AND IMPROVED HIGH SKID GEAR

ZONE	BHT AND AAI PRODUCTS	BHT AND AAI PRODUCTS
	FWD CROSSTUBE INCHES (mm) 	AFT CROSSTUBE INCHES (mm) 
A1	0.005 (0.13)	0.005 (0.13)
A2	0.015 (0.38)	0.015 (0.38)
A3	0.005 (0.13)	0.005 (0.13)
A4	0.015 (0.38)	0.015 (0.38)
B1	0.005 (0.13)	0.005 (0.13)
B2	0.015 (0.38)	0.015 (0.38)
B3	0.005 (0.13)	0.005 (0.13)
B4	0.015 (0.38)	0.015 (0.38)
C1	0.010 (0.25)	0.012 (0.30)
C2	0.010 (0.25)	0.012 (0.30)
C3	0.005 (0.13)	0.005 (0.13)
C4	0.010 (0.25)	0.012 (0.30)
D 	0.030 (0.76)	0.038 (0.96)


NOTES


1. Except as otherwise stated, the information provided in Table 2 and the notes on this page are applicable to Figure 32-2, sheet 8. See Figure 32-2, sheet 8 for zone definition.
2. All dimensions are in inches (except as noted).
3. Repairs limited to one repair per "quadrant", two at any cross section.
4. Log location and depth of all repairs for each crosstube.
5. Repair limits are lifetime accumulation at any location.
6. Repair in Zone D not to impinge on more than one fastener hole.

 Allowable depth of repair is 0.050 inch (1.27 mm) for bottom 0.50 inch (12.7 mm) of area as indicated, except within 0.315 inch (8.00 mm) radius of center of any fastener hole. Otherwise, limits for Zone D are as shown in Table 2.

 0.050 inch (12.7 mm) maximum damage allowed on first 0.050 inch (12.7 mm) of crosstube except as indicated by Note  (Figure 32-2, sheet 5).

 Maximum allowable damage in shaded area is determined in Zone D inspection limits (Figure 32-2, sheet 5).

 Improved forward standard crosstube (BHT 412-050-040-101, AAI 212-320-103).
Improved forward high crosstube (BHT 412-050-046-101, AAI 212-321-103).

 Improved aft standard crosstube (BHT 212-050-222-101, AAI 212-320-104).
Improved aft high crosstube (BHT 212-050-224-101, AAI 212-321-304).

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Figure 32-2. Landing Gear Assembly and Attaching Parts — Damage Limits (Sheet 9 of 9)