2020 Fender Jim Root Jazzmaster

Service Report & Repair Documentation

Prepared July 8, 2026

Flat white Jim Root Jazzmaster documented during service.

Instrument	2020 Fender Jim Root Jazzmaster / Jim Root Jazzmaster V4
Tuning / Strings at final setup	D standard with 11-52 strings
Primary complaint	Persistent buzzing, especially under lower tuning and heavier string tension requirements
Major work performed	Structural neck-pocket reinforcement, nut slot repair, fret stabilization and spot fretwork, heat-assisted neck correction, setup and intonation

Executive Summary

This service documented the incoming condition, confirmed the buzzing complaint, identified a structural neck-pocket stress crack, corrected a compromised G-string nut slot, stabilized loose/high frets, corrected neck geometry with heat and controlled pressure, and completed a final D-standard setup for 11-52 strings.

The largest structural issue was in the neck pocket. The guitar had a routed passage/hole from the neck pocket into the pickup cavity, creating a weak area where a stress crack had developed through wood rather than only finish. The neck was removed to verify the condition. The cavity passage was reinforced with a maple plug and Titebond.

The second major issue was fret and neck geometry. Multiple loose/high frets were found, pressed and glued down, then rechecked with a fret rocker. Localized fret leveling, crowning, and polishing were performed. The neck also showed a forward-bow/warp condition that reduced truss rod backbow range, so heat pads and controlled headstock pressure were used to bring the neck closer to neutral with the truss rod at zero tension.

Area	Condition found	Correction performed
Initial inspection	Buzzing complaint verified; playability and electronics tested.	Full incoming measurement/playability/electronics check completed.
Neck pocket	Stress crack verified as structural wood cracking, not only finish checking.	Neck removed; pocket route/hole reinforced with maple plug and Titebond.
Nut / G string	3rd-string nut slot appeared too deep/wide and contributed to buzz.	Graphite/CA fill first, later plastic/CA reinforcement and reshaping.
Frets	Loose/high frets found across several positions.	Loose frets pressed/glued; 4th, 5th, 6th, 7th, 10th, 11th, 13th, 14th, and 17th frets addressed by spot leveling/crowning/polishing as needed.
Neck geometry	Forward-bow/warp limited usable truss rod backbow range.	Heat pads and controlled pressure applied; neck brought closer to neutral at zero truss tension.
Final setup	Buzz reduced/removed under final D-standard target setup.	11-52 strings, saddle/truss adjustment, intonation, and Loctite Blue on 3rd-string saddle threads.

Note on undocumented step: no photos were available for the heating pad / neck correction procedure. That work is documented here from service notes rather than photo evidence.

Included Fender / Model Reference

The supplied model reference identifies this as a Jim Root Jazzmaster V4 with a 25.5 inch scale, 12 inch fingerboard radius, jumbo frets, hardtail bridge, and synthetic bone nut. The listed factory string set is Fender USA 250R .010-.046, while this service was completed for 11-52 strings in D standard.

Reference item	Included documentation value
Model Name	Jim Root Jazzmaster® V4, Ebony Fingerboard, Flat White
Body	Mahogany
Body Finish	Satin Urethane
Bridge	6-Saddle String-Through-Body Hardtail With Block Saddles
Configuration	HH
Controls	Master Volume

Reference item	Included documentation value
Fingerboard	Ebony
Fingerboard Radius	12" (305 mm)
Fret Size	Jumbo
Neck Construction	4-Bolt Standard
Neck Material	Maple
Neck Shape	Thin "C"
Number of Frets	22
Nut Material	Synthetic Bone
Nut Width	1.685" (42.8 mm)
Scale Length	25.5" (648 mm)
Strings	Fender® USA 250R Nickel Plated Steel (.010-.046 Gauges), PN 0730250406
Tuning Machines	Deluxe Staggered Cast/Sealed Locking
Pickup Switching	3-Position Blade: Position 1. Bridge Pickup, Position 2. Bridge and Neck Pickups, Position 3. Neck Pickup

Intake, Testing, and Measurements

Initial service began with measurement capture, playability testing, buzz checks, string height review, intonation check, and electronics testing. After the structural and fret issues were corrected, the guitar was restrung, stretched, tuned, and set up for the requested D-standard behavior with 11-52 strings.

Measurement / setup point	Service value / result
Final tuning	D standard
Final string gauge	11-52
Final relief / truss setting target	Approx. .015" relief/tension after micro-adjustment; .016" was tested during diagnosis
Action reference	.076" at 8th fret, 6th string (approx. 1.93 mm)
3rd-string saddle height	4/64" (approx. 1.59 mm)
3rd-string saddle threads	Loctite Blue applied to reduce thread back-out
Factory baseline considered	Factory Jazzmaster setup/spec reference used as a baseline, then optimized for heavier strings and D standard
Intonation	Adjusted after restringing and final setup
Electronics	Tested during intake; no separate electronics repair was documented

The final setup point was found by micro-adjusting the truss rod and 3rd-string saddle until the recurring G-string buzz was eliminated under D standard with 11-52 strings. The final best-working window was approximately .015" relief/tension with .076" action at the 8th fret on the 6th string.

Structural Neck Pocket Crack and Maple Plug Repair

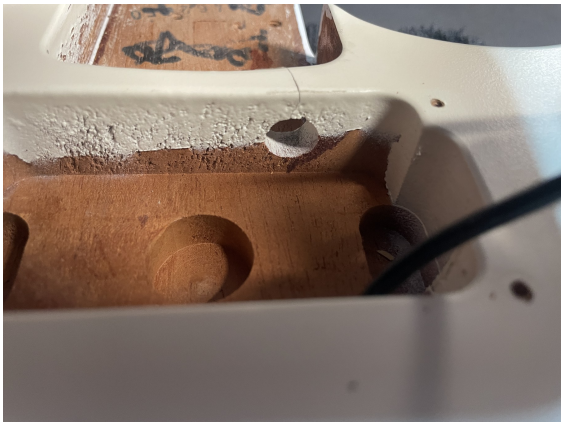
The neck was removed after a structural stress crack was observed near the neck pocket. The crack was verified as wood movement/structural cracking rather than cosmetic finish checking. The route/hole between the neck pocket and pickup

cavity was identified as the stress concentrator.

Repair approach: the routed passage/hole was plugged with maple and Titebond to add material back into the compromised area and reduce further movement around the pocket.

Neck removed; neck pocket exposed for structural inspection.

Close-up of routed pocket passage and crack area before repair.



Pocket/cavity opening documented during inspection.

Maple plug installed and glued into the compromised pocket area.

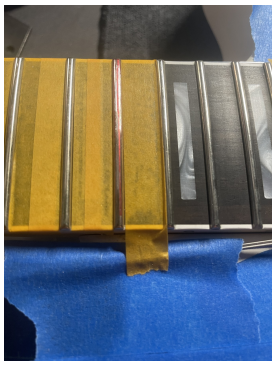
Nut Slot Repair and Fretwork

After restringing and setup checks, the 3rd string continued to buzz. The saddle and nut slot were inspected. The G-string nut slot appeared too deep and/or too wide, causing inadequate support. A graphite and CA fill was used first, then a plastic/CA reinforcement was applied later. The slot was shaped with a slight back-bend support angle, then re-tested.

The buzz persisted when tuned down to D standard. The diagnostic pattern changed as individual strings were adjusted, indicating fret plane problems in addition to the nut slot. High and loose frets were identified, pressed in, glued down, and rechecked. Localized spot leveling, crowning, and polishing were then performed.

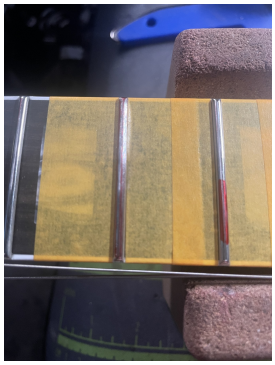
Fret area	Work documented
4th fret	Spot leveled during first fret correction pass
5th fret	Found during second rocker check; leveled, crowned, and polished
6th fret	High fret causing buzz; spot leveled
7th fret	Found during second rocker check; leveled, crowned, and polished
10th fret	Found during second rocker check; leveled, crowned, and polished
11th fret	Spot leveled during first fret correction pass
13th fret	Spot leveled during first fret correction pass
14th fret	Found during second rocker check; leveled, crowned, and polished
17th fret	High fret causing buzz; spot leveled

Fingerboard masked for fret work.



Localized fret leveling/crowning area documented.

Spot fret correction and polish documentation.



Upper-position fret correction documented.

Close-up after localized fret dressing.

Heat-Assisted Neck Geometry Correction

The neck was found to be warped into a forward-bow condition. That prevented the truss rod from applying the needed backbow range, which matters when using larger strings and lower tunings. The neck was corrected using heating pads and controlled pressure applied at the headstock with the truss rod at zero tension. The service note records approximately a 12-degree controlled backbow pressure target during the correction.

After the correction, the neck returned close to center with zero truss tension. That restored useful adjustment range. The neck shim was removed because it was no longer needed after the geometry correction. Strings were reinstalled, the truss was adjusted and re-tested, and the final setup was dialed in for D standard.

No photos were taken during the heating-pad correction step. This report separates photographed repair work from documented service notes, so the heat correction is recorded from the service notes rather than photo evidence.

Step	Result
Neck condition before correction	Forward-bow/warp limited the truss rod backbow range
Correction method	Heating pads and controlled headstock pressure with truss rod at zero tension
Truss range after correction	Neck returned closer to neutral center at zero truss tension
Shim status	Neck shim removed; no longer needed after correction
Buzz status after setup	All strings passed except remaining 3rd-string 1st-11th fret issue until final nut/saddle/truss adjustments
Final buzz result	Only slight decay buzz remained during intermediate testing; final micro-adjustments removed the problematic buzz under target setup

Detailed Service Chronology

1. Recorded incoming measurements, checked playability, tested for buzzes, and tested electronics.

2. Removed neck to inspect the Jazzmaster neck-pocket crack. Verified structural wood cracking rather than finish-only checking.

3. Plugged the pocket-to-pickup-cavity hole using a maple plug and Titebond to reinforce the stress area.

4. Installed new strings, stretched and tuned them, then checked intonation and action against the factory Jazzmaster baseline.

5. Diagnosed persistent 3rd-string buzz. Nut slot and saddle were inspected; the G-string slot appeared too deep/wide. Graphite and CA were used to fill/support the slot, then the guitar was re-tested.

6. D-standard tuning still exposed buzz behavior. High/loose frets were identified. First correction pass spot-leveled the 4th, 6th, 11th, 13th, and 17th frets.

7. Loose frets were pressed in and glued down, then checked again with rockers. A second pass addressed the 5th, 7th, 10th, and 14th frets with leveling, crowning, and polishing.

8. Identified neck forward-bow/warp limiting truss rod backbow range. Applied heat pads and controlled headstock pressure to bring the neck closer to neutral at zero truss tension.

9. Removed the neck shim after the correction, reinstalled strings, and adjusted the truss rod through .012", .016", and final micro-adjusted settings.

10. Reinforced the 3rd-string nut slot again with plastic/CA, shaped support angle, adjusted the 3rd-string saddle to 4/64", applied Loctite Blue to the saddle screws, and finalized the D-standard 11-52 setup.

Photo Documentation Log

The following images were supplied in the job archive and are included as the repair photo record. Captions describe the observed repair context.

Full instrument view.

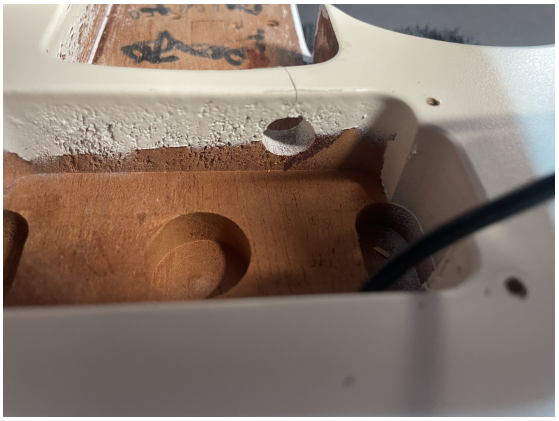
Front reference image of instrument.

Neck heel / profile reference during disassembly.

Neck heel markings and measurement reference.

Neck pocket with neck removed.

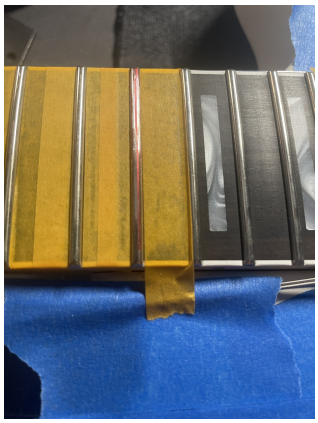
Stress crack / cavity route area before plug repair.



Pocket/cavity route inspected.

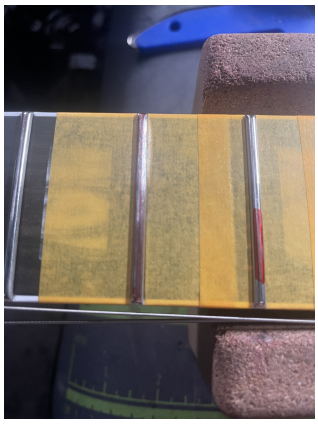
Maple plug installed in pocket area.

Masked fingerboard before/while performing fretwork.



Close-up of localized fretwork.

Spot leveling/crowning/polishing documentation.



Upper fret correction documentation.

Close-up of polished/corrected fret area.

Final Service Notes and Monitoring Recommendations

The guitar was returned to a playable final setup under D standard with 11-52 strings. Because the instrument had a structural pocket crack, nut slot correction, glued frets, and heat-assisted neck correction, it should be rechecked after a settling period under string tension.

Item	Recommendation
Neck pocket repair	Monitor the stress crack area after seasonal humidity changes and after any future neck removal.
Nut slot repair	Recheck the 3rd-string slot height after the CA/plastic fill fully cures and wears under playing pressure. Replace the nut if the repaired slot becomes unstable or noisy again.
Fretwork	Recheck with fret rocker after settling, especially in the previously corrected 4th-17th fret regions.
Neck correction	Allow the neck to settle under the final 11-52 D-standard tension. Re-measure relief after acclimation.
Setup	Final setup is optimized for D standard and 11-52. Changing tuning or gauge will require new relief/action/intonation checks.

Service completion statement

Structural neck-pocket reinforcement completed. Nut slot corrected and retested. Loose/high frets stabilized and spot dressed. Neck geometry corrected to restore truss adjustment range. Final setup and intonation completed for D standard with 11-52 strings.

Technician:	JR's Custom Shop Guitars / Torrance Guitar Setup & Repair
Date prepared:	July 8, 2026