

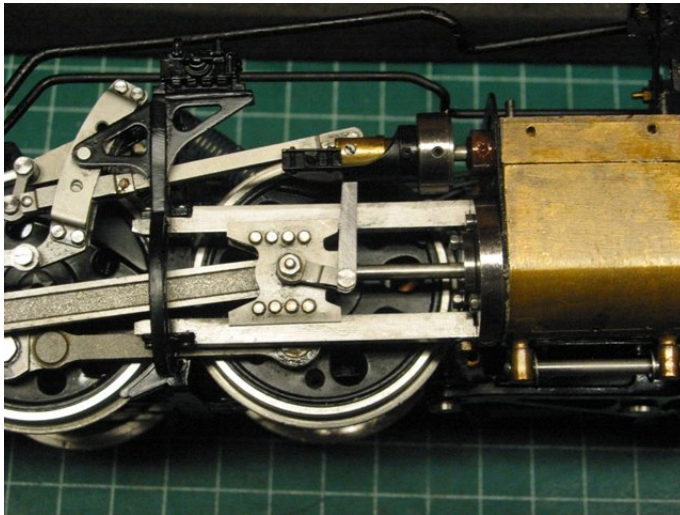
Accucraft Cab Forward (AC-12) Upgrade: Cross head and guide

Thanks to the work of Gordon Watson, Ryan Bednarik and Jeff Redeker; this DIY sheet can help owners of the Accucraft AC-12 upgrade their fine steam locomotives in areas that can improve performance and/or prevent premature failures.

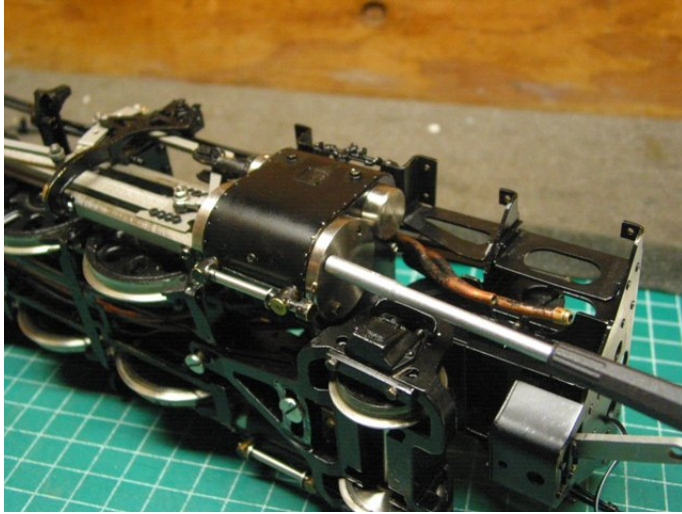
There are several mechanical and structural areas on the Accucraft Cab Forward that could be improved. These improvements would be necessary for the betterment of running characteristics, overall functioning and preventative of premature wear and tear. Based on this premise we offer a series of key areas that will enhance your AC-12 for the long term: cross head and guide, rear engine flex joint, combination levers and suspension.

The main reason for upgrading the cross head is to correct the excess play in the crosshead-main rod connection and the lateral play that ensues.

Part Two- *Crosshead and lower guide removal:*



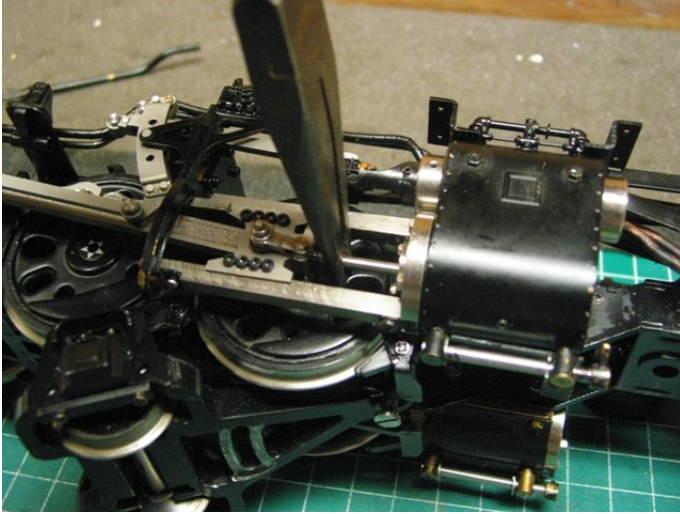
OEM cross head is pictured above. Make note of the various positions of the different linkages and the relation of the crosshead to them.



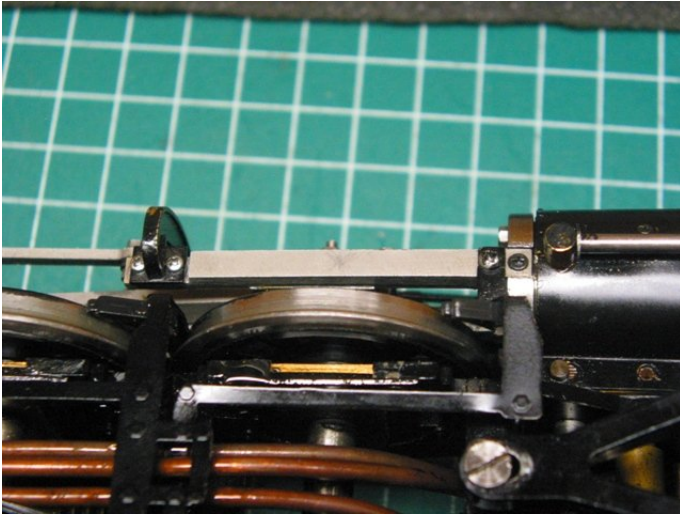
1. Cylinder head: Remove the trailing truck main pivot screw and move the trailing truck allowing for better access to the 4 cylinder head bolts (either 1/8" or 2 mm)



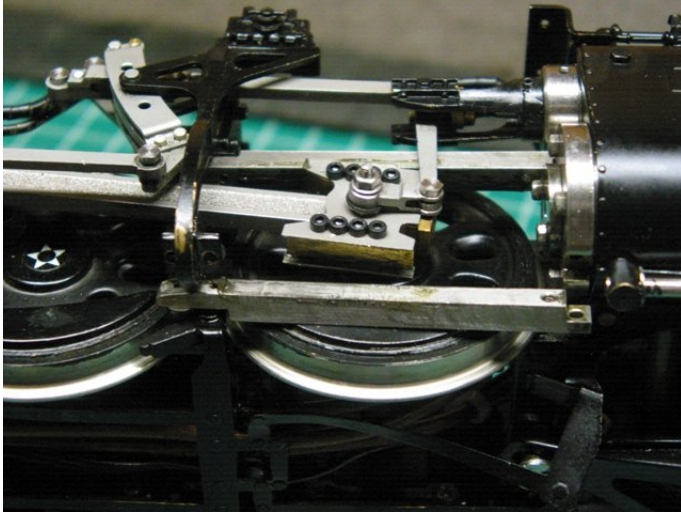
2. Reference points: cross head moved so that the piston is top dead center. Make note of this position as it is crucial to steam admission. The front of the piston should be even with the rear of the passage relief in the cylinder.



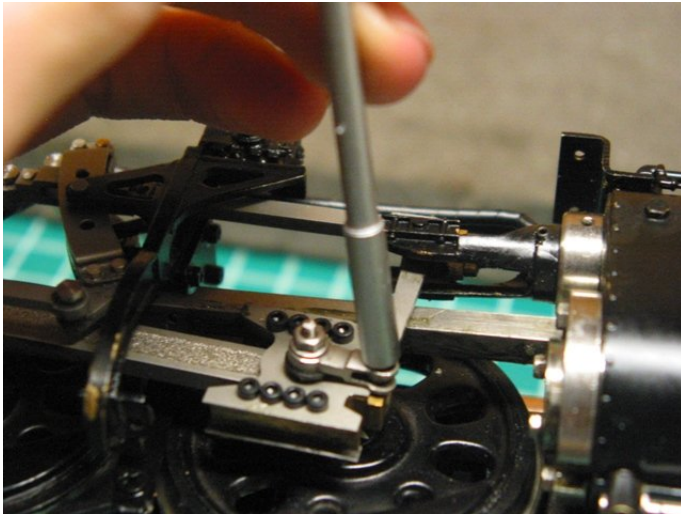
3. Piston rod: screw out the piston rod nearest the threads using smooth jaw pliers to prevent marring the rod.



4. Crosshead guide: Unscrew the bottom cross head guide 4 screws (2 on rear cylinder head and 2 on support bracket)



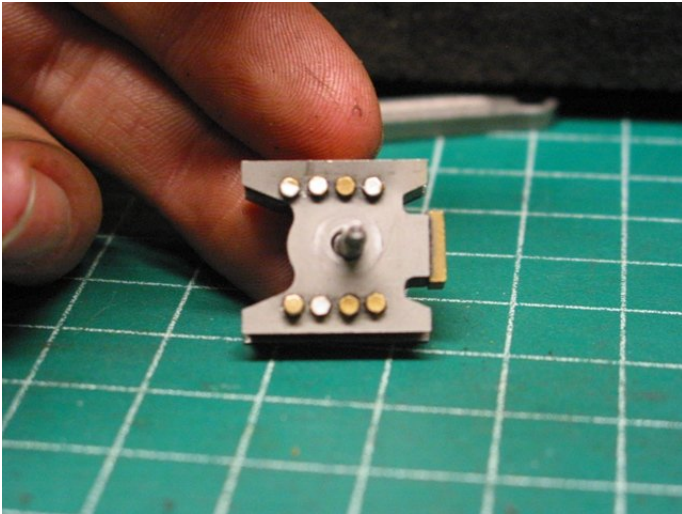
5. Bottom crosshead guide removed



6. Union link: Unscrew the shoulder bolt (1/8" drive) connecting the union link to the "dummy" combination lever.



7. Timing mark: make a reference mark on the crank pin to reposition eccentric properly.



8. Cross head removed.