



366 GAS ASSIST RETROFIT INSTALLATION

You will need the following common hand tools, or substitutes to install this on your loader. On some very early loaders it may be necessary to replace the base casting before assembling the Gas Assist.

3/4" Box End Wrench
5/8" Wrench
9/16" Wrench
7/16" Wrench
3/8" Wrench
10MM Wrench

3/32" Hex Key
1/8" Hex Key
5/32" Hex Key
5/16" Hex Key, (long arm or square drive Preferred)
Large straight Screwdriver

WARNING: REMOVE ALL POWDER, SHOT, PRIMERS AND SHELLS DO NOT ATTEMPT TO INSTALL THE GAS ASSIST WITH OUT REMOVING COMPONENTS FROM THE PRESS.

Notice

Before installing the Gas Assist, on your 366, clean and lubricate your press. Check the shell plate for free and easy rotation, make certain to remove the shell plate, and clean all powder, shot, and old grease from the unit.

Check the shell plate for flatness by placing it upside down on a hard flat surface, and pressing down on the outward edge of the plate. If it rocks noticeably it **must** be flattened. This can be done with normal mechanical means.

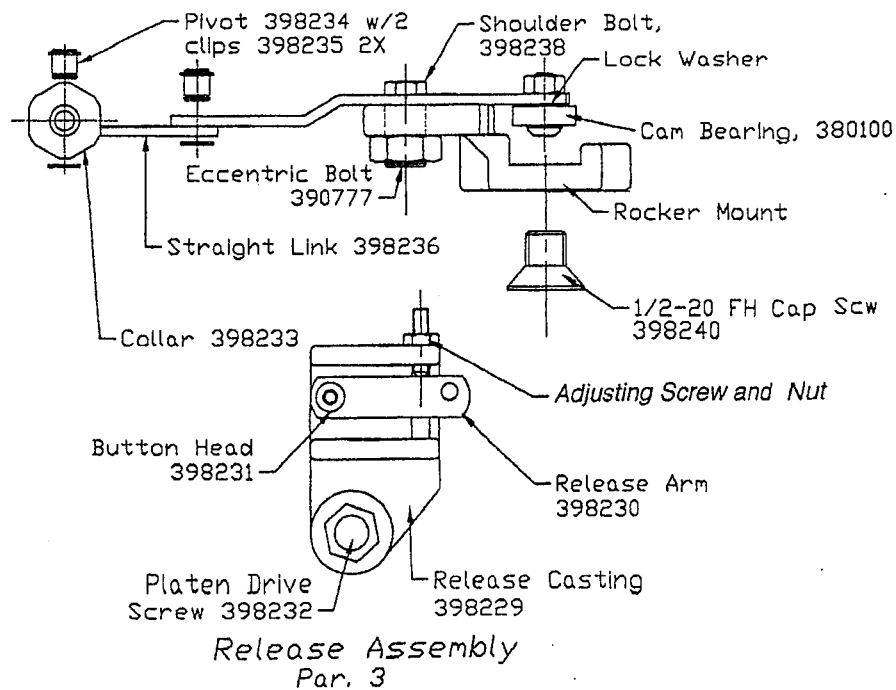
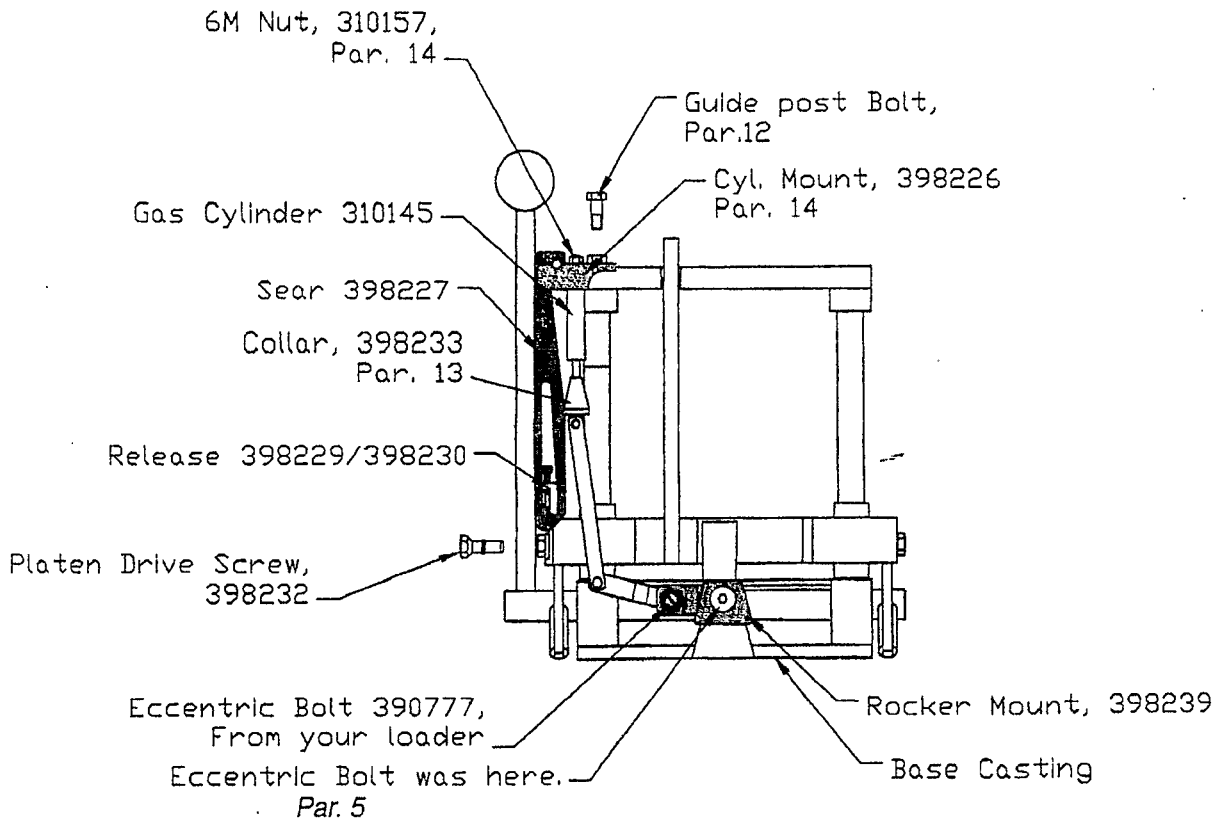
This also is an indication that your primer feed is improperly adjusted. The metal body of the primer feed should not touch the shell plate. If it does, two things will happen, you will bend the plate, and cause it to drag. You may also burr the inside of the hole of the body causing primer feed problems.

Before removing the loader from the bench to install the Gas Assist loosen the right hand guide post bolt, and the right side platen drive bolt. These may be quite tight, and having the press securely mounted to the bench will make it easier to loosen them. Once this is done, remove the loader from the bench to install the Gas Assist.

You will need to refer to the illustrations for correct positioning of the parts. During the original installation, do not tighten mounting hardware until everything is assembled, as it may be necessary to align parts for proper functioning.

1. Place your loader on the bench, so the back is clearly visible and easily accessible
2. Raise the platen about 2-3" and place a block under the platen to prevent it from falling.
3. Assemble the release assembly with a button head screw, and install the screw and lock nut. (The release has multiple hole locations to use. The proper one is the one that will have the release nearly horizontal when adjusted). Remove the existing platen drive screw, and install the release assembly, using the new platen drive screw.
5. Loosen and remove the Jam nut from the eccentric bolt, and remove the eccentric bolt from it's mounting location.
6. Disassemble the eccentric bolt assembly, be careful not to damage the threads, as you will reuse this bolt.
7. Using the button head cap screw and the 1/4 nut and lock washer mount the cam bearing on the end of the offset linkage. Tighten this securely but make sure the bearing is able to turn freely.
8. Install the eccentric bolt into the threaded hole of the rocker mount.
9. Mount the offset linkage and roller to the eccentric bolt using the special shoulder bolt. (**Note: Once the linkage is attached to the eccentric bolt, back the eccentric bolt all the way out so the linkage is tight against the bracket, then turn it 3/4 turn back. This is where you will want to start your adjustment.**)
10. With the 1/2-20 flat head cap screw mount the rocker mount to the base casting, where you just removed the eccentric bolt.
11. Lower the platen to it "at rest" position.
12. Remove the guidepost bolt from the top of the loader on the left side (as you now face it).
13. Screw the long shaft end of the gas spring cylinder all the way into the cylinder collar.
14. Run the threaded stud end of the cylinder thru the hole in the cylinder mount and secure it in place with the 6M nut, but do not tighten it now.
15. Place the cylinder mount on top of the press and secure it using the old guide post bolt.
16. Hang the sear in place from the mounting bracket with the release protruding through the irregular slot.
17. Rotate the mounting bracket to align the sear parallel with the the back edge of the base casting.
18. Tighten the guide post bolt, the 6M nut on the cylinder, and the 1/2-20 flathead now. The 1/2-20 flathead will need to be very tight, just don't strip the thread. (**Note: Some radial alignment of the mounting bracket may be necessary to make sure the linkage works freely. When properly adjusted the pivot pins should "just" clear the casting, the sear should swing freely, and the linkage should not be bound.**)

19. Cycle the press. The collar should have hooked to the sear. If the release disengaged the sear before the bottom of the stroke, back it off. If it did not release, adjust it down until it does. It should release at the very bottom of the stroke. Tighten the button head screw, and lock the adjusting screw in place.
20. The cylinder should have indexed the shell plate, but most likely was either short, or long. Using a screwdriver and hex wrench, adjust the eccentric bolt to give the proper index. With the shell plate locked in the detents, the pawl should be just short, (no more than the thickness of a few sheets of paper) of touching the shell plate.
21. Properly adjusted the sear should release at the bottom of the stroke and the shell plate should index just far enough to clear the end of the feed pawl.



HORNADY 366 GAS ASSIST SHOTSHELL LOADER

Your new 366 Shotgun Loader has had the Gas Assisted Indexing factory installed. It has been adjusted for proper indexing, but the Sear has been removed from the loader, and wrapped separately for shipping purposes. After your loader has been mounted to the bench per the instructions, (pg. 2). Check all attachment hardware to make sure everything is tight. Hang the Sear from the cylinder mount, making sure the release arm is extending through the large irregular slot of the sear. Cycle the press to make sure it is indexing properly. The Collar should hook on the sear near the top of the stroke. It should release very near to the bottom of the stroke. Adjustment for the release can be made with the set screw for the release arm. Proper indexing is when the shell plate locks in the "Detent" but there is a small amount of clearance from the edge of the pawl to the shell plate. If the shell plate becomes bent, damaged or otherwise obstructed, indexing may become "Short". Corrective action should be in the direction of eliminating the obstruction. If it does become necessary to adjust the length of travel for indexing, loosen the jam nut on the eccentric bolt. With a straight blade screwdriver rotate the eccentric bolt to get proper indexing and lock it back in place with the jam nut.

