HX

Brake Release Assembly Replacement Instruction

SERVICE NUMBER: 111861.0001

Parts Included: Brake Assembly, (4) Standoff, (4) Track Bolts, Release Arm Assembly, 18T Pinion Gear, (2) Thrust Washer, Thrust Bearing, "C" Retaining Clip, "E" Retaining Clip, Release Spring, (4) O-Ring, (4) Nylock Nut, Brake Harness, Har - ness Connector, Cable Tie, Grease

Tools Required: Straight Screwdriver, 1/4", 5/16" & 11/32" Nut Drivers, 1/8" Allen Wrench, Needle Nose Pliers, Hammer, 7/32" Punch, Wire Stripper

Approximate Time Required: 1 Hour.

⚠ WARNING

BE SURE ELECTRICAL POWER HAS BEEN DISCONNECTED FROM THE INPUT POWER LINES PRIOR TO REMOVING THE ELECTRICAL BOX COVER. AN APPROPRIATE LOCKOUT/TAGOUT PROCEDURE IS RECOMMENDED

1. Make Sure Door is Closed.
2. Remove power from the unit. Use proper Lock-out/Tag-out procedures. (Refer to OSHA Standard 1910.147)
3. Remove the Set Collar (A), Chain Guard (B) and Pocket Wheel (C). FIG 1.
4. Remove Housing Cover Screws (D) on both sides of the Housing to remove Cover. (FIG 1)
5. Remove "E" Retaining Clip (A) next to the Bevel Gear (B) on the Hoist Shaft. Slide the Bevel Gear (B) on the Shaft to expose the Floating Pin (C). Remove & retain the Floating Pin. (FIG 2)
6. Drive the Roll Pin (D) out of hoist shaft. Remove the "E" Retaining Clip (E) and Bearing (F). Pull the Shaft, Bearing and Washers out of the Housing from the opposite side, capturing the Bevel Gear as the Shaft is removed. (FIG 2). Leave remaining Bearing, Washers, "E" Retaining Clip and Roll Pin on Shaft.
7. Compress the Release Spring (D) on the Reducer Shaft and remove the "E" Retaining clip (C) from the Reducer Shaft. Remove the Release Spring. (FIG 3)
8. Remove the "C" Retaining Clip (E) from the Reducer Shaft. Remove the 18T Pinion Gear (F), Thrust Washers (G), Thrust Bearing (H) and Release Arm Assembly (I). Disconnect the Red Release cord from the Release Arm Assembly (I).(FIG 3)
9. Disconnect the Brake Harness leads from the Brake Assembly (K). (FIG 3)
10. Remove the 4 Brake mounting Nuts (A) and "O" Rings (B). Carefully pull the Brake Assembly forward and rotate clockwise slightly to avoid hitting the Cutout Switch with the Brake Assembly Terminals. Slide Brake Assembly off Reducer Shaft. (FIG 3)

If necessary, replace the Brake Harness.

11. Cut the Wire Tie (B) that secures the Brake Harness (C) to the Interlock Switch Bracket (D) (FIG 4)
12. Pull the Harness out of the Enclosure and through the Cable Clamp.
13. Unplug the Harness from the Circuit Board and cut the Connector off the end of the Harness. Pull Harness out of Electric Box.
14. Route new Harness into Electric Box and insert leads into new Harness Connector (FIG 5). Plug connector onto Circuit Board.
15. Route other end of Harness back through Cable Clamp and into Enclosure. Wire Tie the Solenoid Harness and Interlock Switch Harness to the Interlock Switch Bracket (FIG 4)

If necessary, replace the Brake Mounting Standoffs.

16. Unscrew the Interlock Switch Bracket (D) from the Enclosure and unscrew the Switch (E) from the Bracket. (FIG 4)
17. Cut the Wire Tie (B) that secures the Brake Harness (C) and Interlock Switch Harness to the Bracket. Remove the Bracket and pull the Harnesses out the back of the Housing. (FIG 4)
18. Slide the Limit Sprocket (A) off the Limit Shaft to expose the Housing mounting bolt (B). Remove the two Housing mounting bolts (B) that secure the Brake Housing to the Limit Switch Housing. (FIG 6)
19. Remove the two mounting screws (C) that secure the Electric Box to the Brake Housing. (FIG 6)
20. Remove the four bolts (D) that secure the Brake Housing to the Gear Reducer. (FIG 6)
21. Remove the Brake Housing and remove the four Standoffs (E) from the Housing. (FIG 6)

If necessary, Replace Track Bolts

22. Tap Track Bolts (F) out of housing and install replacements. (FIG 6)
23. Install four new Standoffs (E) and re-mount the Housing to the Gear Reducer with 4-Bolts (D). (FIG 6)
24. Reinstall the two bolts (B) that secure the Brake Housing to the Limit Housing and the two screws (C) that secure the Electric Box to the Brake Housing. (FIG 6)
25. Reinstall the Limit Sprocket (A). (FIG 6)
26. Route the Brake Harness and Interlock Switch Harness back into the housing. Attach the Interlock Switch to the Bracket, Wire Tie the Harnesses to the Bracket and remount the Bracket to the Housing. (FIG 4)

P/N 111898.503476 03/2017 Printed in Mexico

27. Apply a small amount of Grease to the Gear Reducer Shaft and carefully slide the new Brake Assembly (K) onto the Shaft. Rotate the Brake Assembly slightly clockwise to prevent the Brake Terminals from hitting the Interlock Switch as you position the Brake Assembly on the Standoffs. (FIG 3)
28. Install four new "O" Rings (B) and four new Nylock Nuts (A). (FIG 3)
29. Connect the Brake Harness leads to the Brake Assembly.
30. Reconnect the red Release Cord to the Release Arm Assembly (I) and slide Release Arm onto Reducer Shaft. Insert Thrust washer (G) on Release Arm.
31. Install new Thrust Bearing (H), Thrust Washer (G) and 18T Pinion Gear (F) on Reducer Shaft and install new "C" Retaining Clip (E). (FIG 3)
32. Install new Release Spring (D) and "E" Retaining Clip (C) on Reducer Shaft. (FIG 3)
33. Slide the Hoist Shaft, Bearing and Washers back into the Housing and install the Bevel Gear (B) on the Shaft. Insert the Floating Pin (C) in the Shaft and slide Bevel Gear (B) over Floating Pin. Secure Bevel Gear with "E" Retaining Clip (A). (FIG 2)
34. Install Bearing (F) in opposite end of Housing and secure with "E" Retaining Clip (E). (FIG 2)
35. Reinstall Roll Pin (D) in Shaft. (FIG 2)
36. Reinstall Brake Housing Cover (A) with 8 Screws (D). Install Release Cord Loop (F) as shown. (FIG 1)
37. Reinstall the Pocket Wheel (C), Chain Guard (B) and Set Collar (A). (FIG 1)
38. Turn on power to Operator. If Limit Sprocket was removed, reset Limit Switch settings in accordance with the installation manual provided with the operator.

FIG. 1

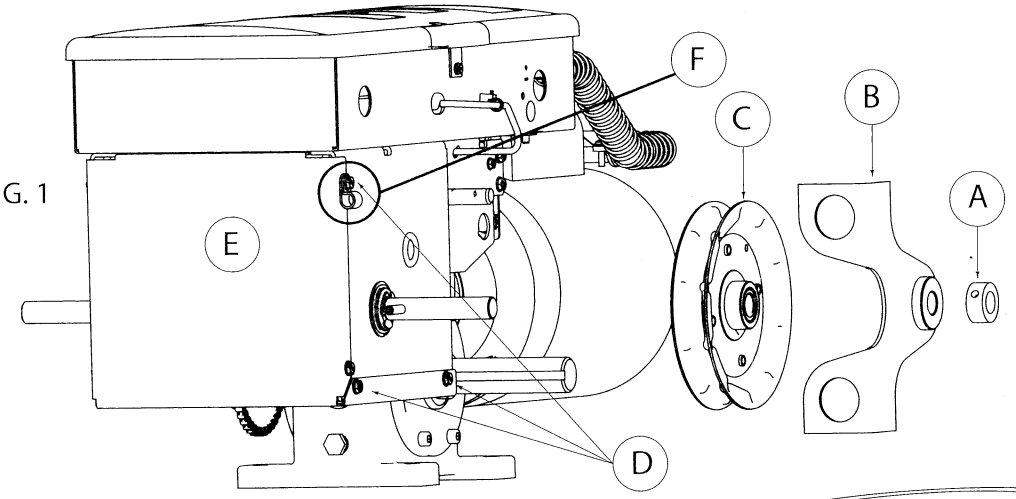
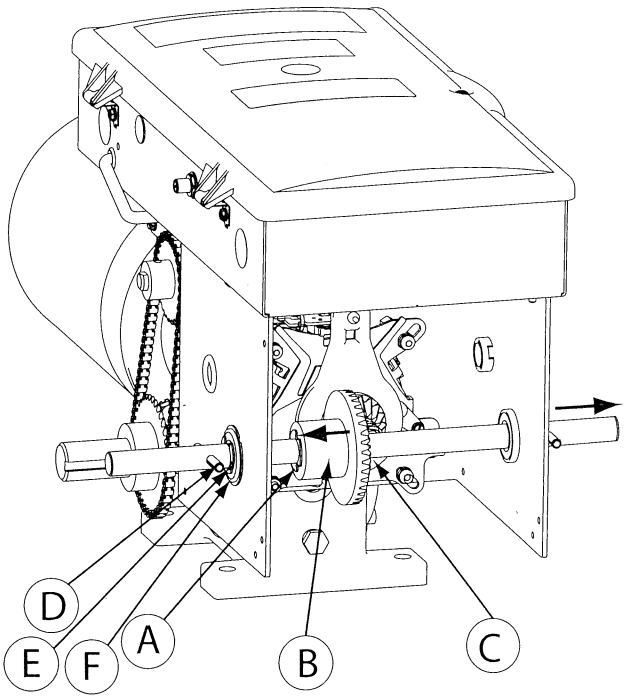


FIG. 2



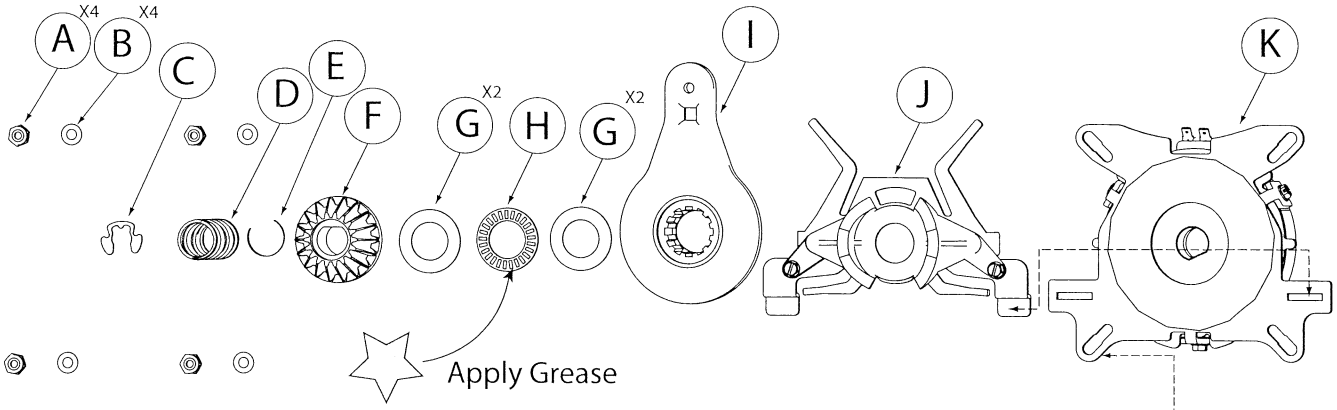


FIG. 3

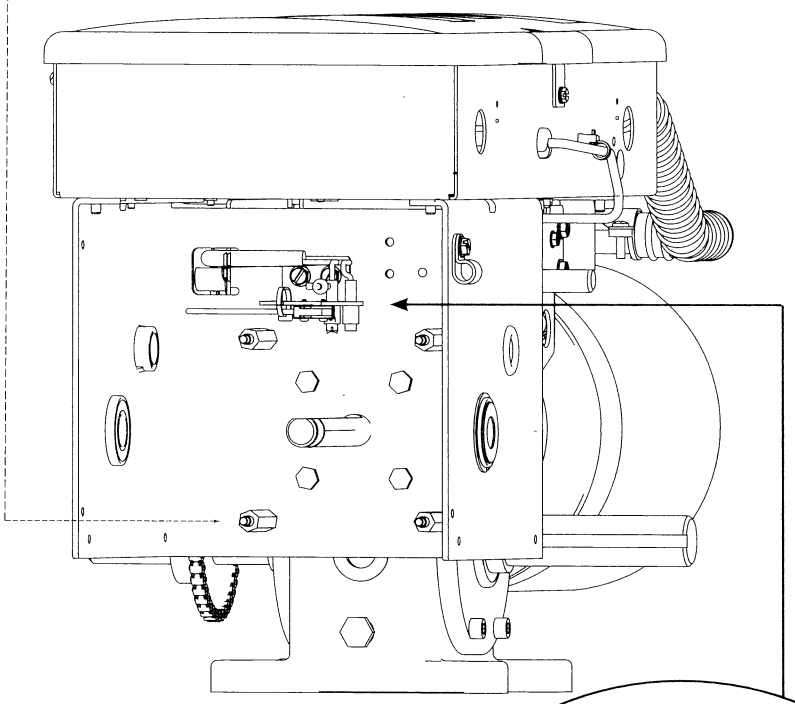


FIG. 4

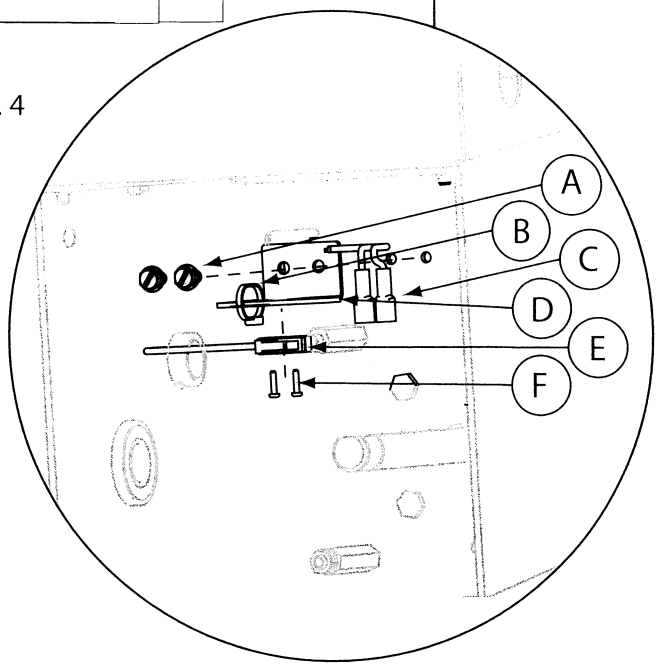


FIG. 5

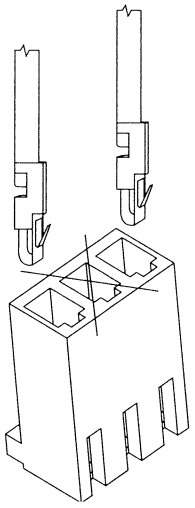


FIG. 6

