IMPORTANT

Contained within is a comprehesive set of instructions for the Halo V2 locker kit for 2025+ Can Am Visco differential.

If you are an instruction skimmer, pay close attention to a couple very common gotcha's with this assembly listed below.

1. Carrier Shim (14) on page 1 step 4 sets the ring and pinion back lash. Note it's location during dissembly and save for reassembly to ensure proper gear mesh.
2. Review the note in Figure 2a and watch for the securing pin to remain in place. It is very easy for it to fall out and reassemble witout noticing. If this happens and is missed, differental falure will occur almost immediately.
3. Review the note in Figure 2. And ensure the backplate (2) does not rock or teeter and is installed in the proper grooves, seating fully against the carrier. Check for internal gear binding upon carrier reasembly. You should be able to spin gears freely by hand with carrier cap tightend down.

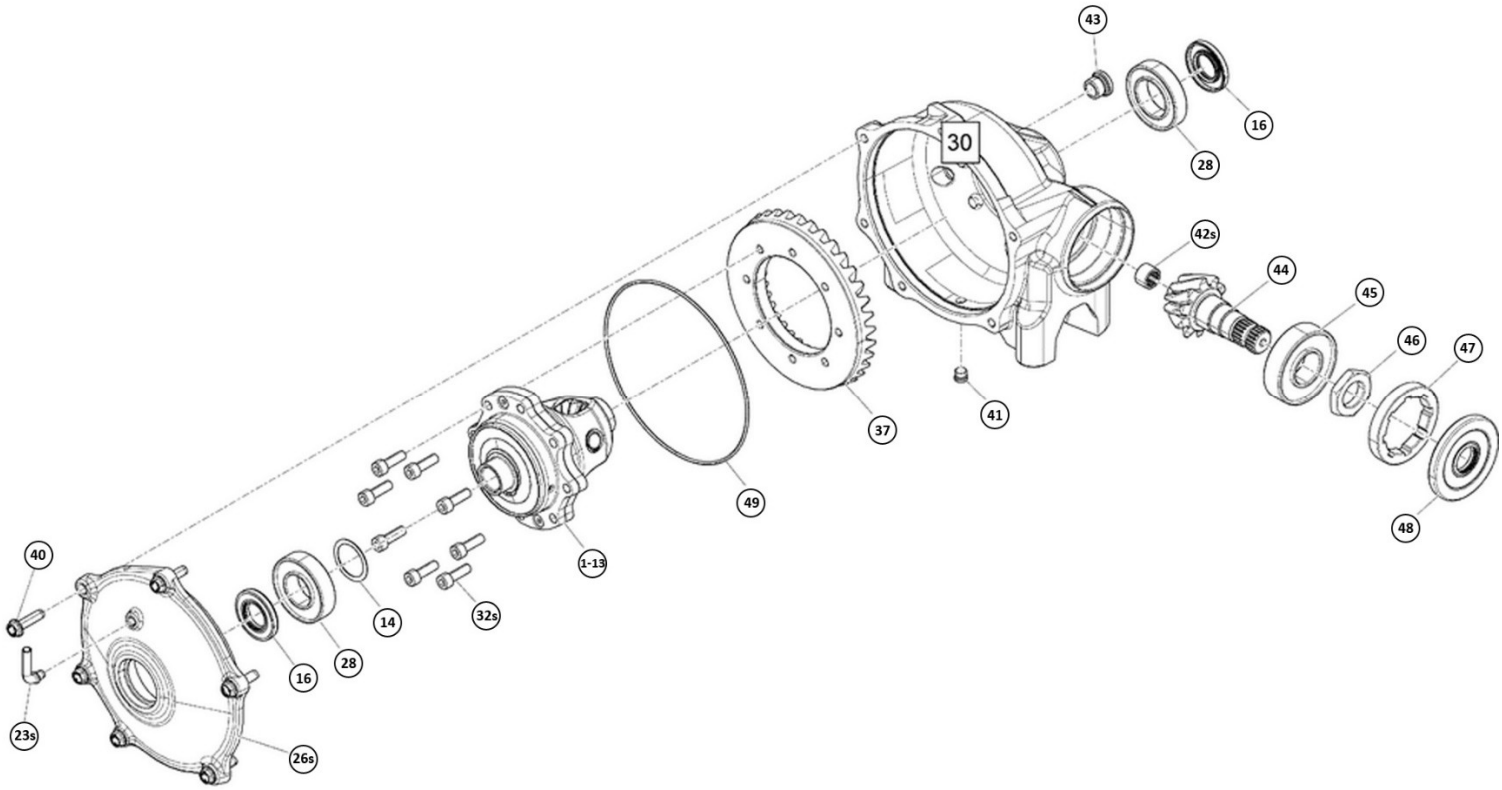

Figure 1

1. Remove the front differential from the vehicle per manufactures instructions.
2. Clean the differential to prevent debris from entering.
3. Remove case lid (26s) and save hardware (40) and O ring (49) for reassembly.
4. Shim (14) will likely remain on the bearing journal of the carrier, but it may stick to the bearing (28) when removed. Save this shim for reassembly.

Note: This shim (14) sets the gear backlash and will need to be reinstalled in the same spot during reassembly.

5. Remove the carrier and ring gear assembly from the case, then remove the ring gear (37) from the carrier (1–13).
6. Use Figure 2 to prepare the carrier for reinstallation.

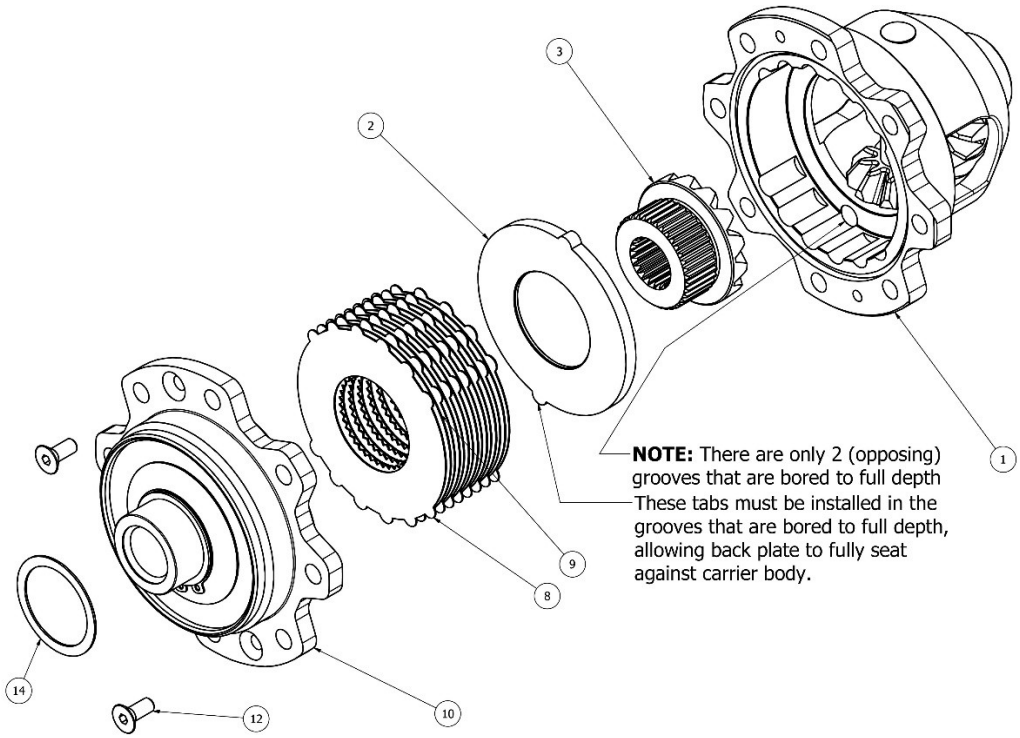

Figure 2

7. ***Before carrier disassembly take note of Figure 2a***.
8. Remove screws (12) and remove carrier cap (10) from carrier (1). Screws (12) will not be used for reassembly, they are now unnecessary and could loosen/come out, causing damage.
9. Remove all clutch plates and discs (8), (9) from carrier (1). ***Be sure to remove all clutch plates and discs; it is easy to miss one***. Clutch plates and discs will not be used for reassembly.
10. Cap (10), all clutch plates and discs (8) & (9) can be discarded. Screws (12) will be used to assist with reassembly but will ultimately not be used.
11. Use Figure 3 to reassemble differential with locker kit.

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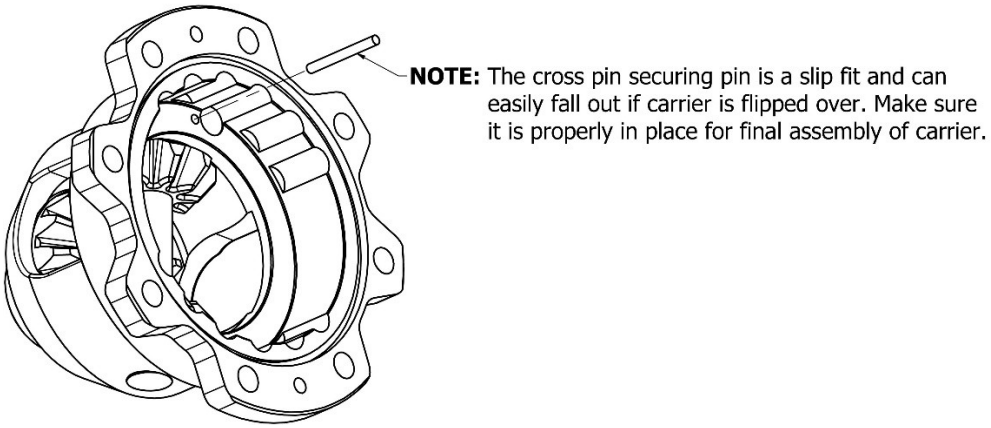

Figure 2a

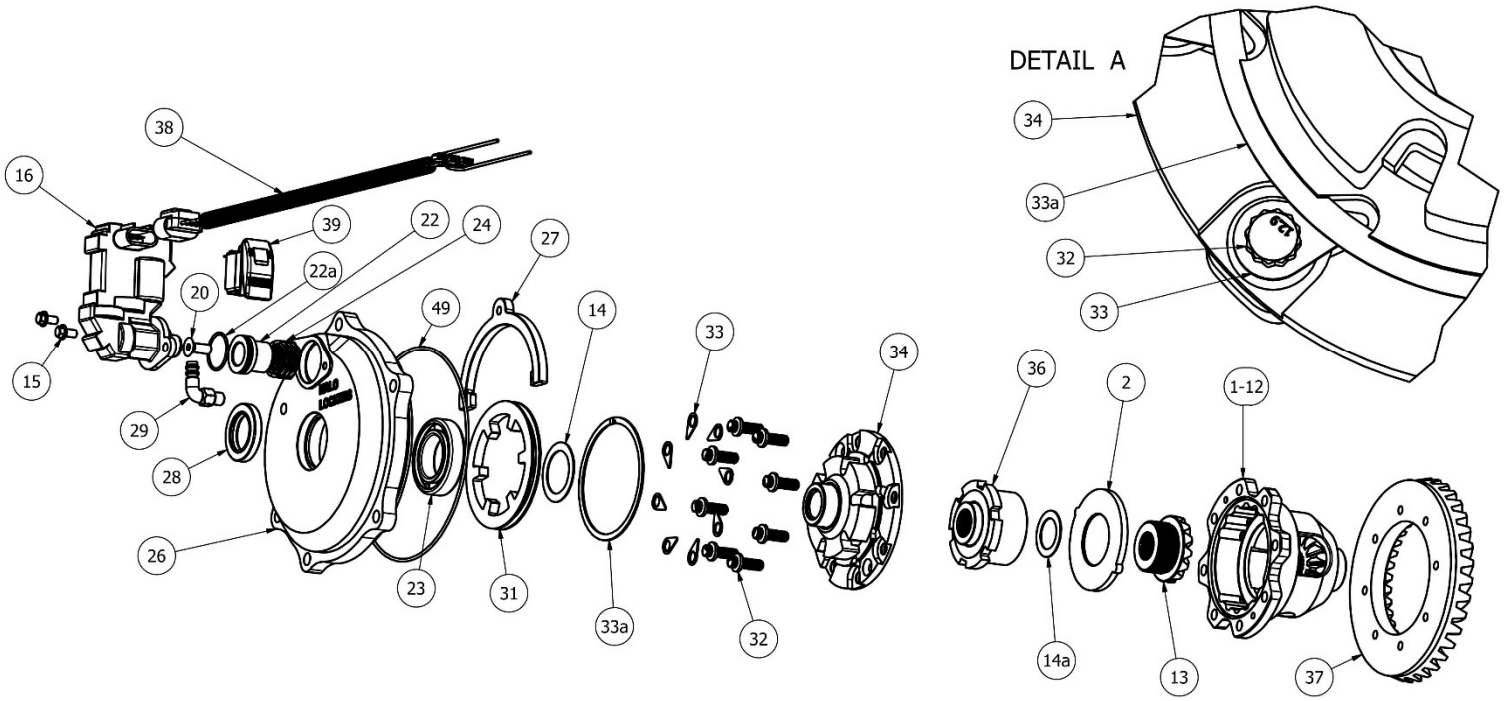

Figure 3

12. Use some gear lube to coat mating/moving surfaces during assembly.
13. Install gear (13), and backplate (2) with counter bore against gear, into carrier assembly (1-12). ***Ensure backplate (2) does not rock or teeter and is installed in the proper grooves, seating fully against the carrier.*** (see note in figure 2)
14. Place shim (14a) on top of gear (13) ***only if supplied in kit*** (Shim (14a) 1.5" OD x 1" ID), will be omitted in later kits)
15. Install lock gear (36) on gear (13) then install cap (34) using screws (12) from figure 2 to temporarily hold the assembly together. ***Make sure the internal gears can spin freely by hand and not bind.***
16. Install ring gear (37) on carrier assembly, using bolts (32) and torque to 33 ft-lb. Install lock tabs (33) on bolt (32) (flip tab for more lock positions) Secure lock tabs (33) with retaining ring (33a) by installing the retaining ring into groove on cap (34). Remove screws (12) and discard.
17. Assemble the Halo case lid shifting mechanism using an assembly lube. The components in this step, may be pre-assembled if so skip to step 18. Place spring (24) on piston (22) with O-ring (22A) installed, then place into case lid (26), screw fork (27) to piston using screw (20).
18. Slip locking ring (31) onto fork (27) and center the ring relative to the cover. (note: slightly push piston from outside of lid for easier fork installation)
19. Place lid assembly (26) onto flat on table and carefully align locking ring cogs with their respective slots in carrier cap, assembling the carrier and lid assembly together using shim (14) saved from step 4, between carrier cap (34) and bearing (23). Leave assembly lying as is flat on table.
20. Lubricate and install O-ring (49) on lid (26) then place case assembly onto lid and carrier assembly aligning bolt holes in lid assembly with blot holes in case assembly. Using your hand or a soft mallet, gently seat the lid into the case. And install bolts (40) removed in step 3. Torque to 17 ft-lb.
21. For clearance and easier installation, install motor actuator (16) with bolts (15) and breather fitting (29). After Installing differential assembly back in vehicle and before reinstalling the left axle shaft.
22. Service differential with oil per manufacturer instructions for both oil type and fill level.

Note: The oil capacity with the Halo locker kit may be a little more, however the fill level procedure is the same.

23. Install switch (39) and harness assembly (38) in desired location, being careful to wire switch correctly as shown in figure 4.

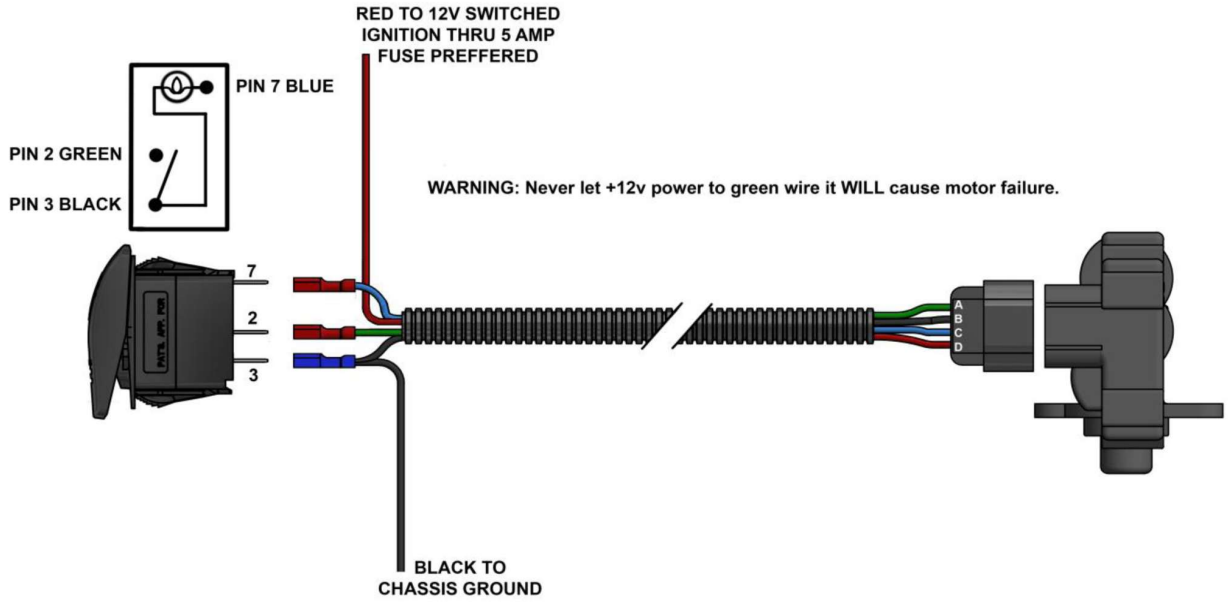

Figure 4

Note: *It is a common mistake to install the blue crimp connector to the switch terminal that should be connected to the blue wire. When we say blue to pin 7 we mean wire color not connector color.*

Actuator Operation and Custom Wiring Information

Wiring:

Blue wire connected to terminal/pin 7 is feedback from the motor for the light in the switch.

Green wire connected to terminal/pin 2 on the switch, this is the motor control.

Black wire connected to ground and terminal/pin 3 on the switch, this is ground for the motor and control for the switch.

Red wire to 12-volt ignition switched power source. This is power for the motor to operate not control. It is recommended to fuse at 5 amps.

Operation:

When the motor is powered and there is no ground on the green wire to the motor, the motor will drive to the unlock position.

When the motor is powered and there is a ground placed on the green wire to the motor, the motor will drive to the locked position.

When the motor reaches full travel (extend), it will feed 12 volts to the blue wire for the light in the switch.

Once the motor has driven to lock or unlock it does not need or use power to stay there.

The actuator motor has overload protection, if it trips power must be removed from actuator for it to rese