

Changing the handlebar on an Indian Chief Vintage (2014 model)



AUTHOR'S NOTES:

I love my Indian Chief Vintage, and have put some 12,000 miles on it in a bit less than 2 years. Certainly not “iron Butt” qualifying, but I dare say higher than the average 3-year-old garage queens I frequently see on eBay with less than 2,000 miles on them.

For me, there is little not to like about the new Indian as a cross-country road bike, with one exception: From the first time I rode my bike more than 50 miles, I felt the handlebar position forced my wrists outward at an unnatural angle, creating stress on my bike. I won't say this is an endemic issue, but for my particular body shape and dimension (6'2" – 205 lbs), it has come to be a significant issue. In fact, on a recently-completed 2,000 mile solo trip, I really had some troubling neck and back aches along the way.

So.. I have decided to give Indian's "Beach Bar" a try, as the shape does clearly give a more "wrist-in" countenance.

I could have just paid the dealer's installation price (on top of the \$200 price for the bars), but after talking it over with the service department, I came to the conclusion that this is a task easily accomplished by an average handyman with a handful of tools.

That said, I want to state that WHATEVER PRICE the dealer wants to charge for this handlebar swap, it is probably not too much! I consider myself a pretty decent mechanic, well equipped with every tool known to man, and, still, I have expended the better part of 3 days completing this task.

Nevertheless, I don't at all regret my decision to tackle this project myself, as it has been a great discovery process, and I now have a much great appreciation for the way my incredible bike is put together.

Nothing in the process is rocket science, however, my extensive internet research for guidance on completing this job came up with woefully inadequate guidance.

I found any number of "gotcha's" along the way, none documented in any of the other brief installation descriptions. I am convinced that, had I had more detailed directions, I could have saved myself a couple of hours of head scratching and prevented removing items that weren't needed.

It is my attempt to fill this void by providing a step-by-step description, both for others who might want to have the satisfaction of accomplishing this project on their own, and as documentation for myself, should I need to try yet another handlebar in the future!

Although this guide was written to specifically address my own bike, a 2014 Chief Vintage, I do believe the basic process holds true for any of the Indian model line, and as you will see in the narrative, Indian does provide additional unused connectors in the Vintage harness that are likely used on the Roadmaster and others.

Finally, take note that you WILL be working with any number of electrical connections, and there is always the possibility of inadvertently pressing the ON button, it would be prudent to disconnect the power cable at the battery before beginning.

Tools you will need:

- 1) A set of metric sized hex-head sockets (an ordinary set of allen head 90 degree keys will almost certainly not be adequate to break out the larger connecting bolts)
- 2) A set of star-bit (Torx) sockets to remove the handlebar screw/bolts
- 3) A small thin flat-blade screwdriver to release the electrical connectors
- 4) Thread locker compound (Polaris didn't use lock washers on any of the components you will be removing, so it is important to use the thread locker on all screws and bolts when reassembling)
- 5) A helper for some of the 3-hand tasks

That's it!

Good luck with your project.

1. **Remove the left side hand grip** by slightly peeling back the rubber on the AFT Horizontal section of the grip, nearest the switch control box. You will see a screw there, which secures the grip to the bar, and goes all the way through from aft to front. Remove that screw, then with some judicious twisting, the grip should come loose. If it is reluctant (there IS some adhesive used as well), try using a rubber strap wrench and/or heating the grip with a heat gun to loosen the adhesive. Note that this long screw connects to a captive nut on the far (front side) of the grip, so make sure you don't lose this little nut while pulling the grip off



2. **Cover the gas tank, AND** the entire front fender to protect from scratches

3. **Remove the handlebar bag**, if equipped, by looking under the lining, inside, near the front bottom, and removing the two allen-head screws. CAREFUL! There is a ¼" spacer around the screw *underneath* the bag and it can be very easy to lose these when removing the bag. Best approach... completely loosen both screws but do not remove, then carefully slide a finger from each hand underneath the bag from the front, to capture those spacers as you lift the bag away

4. **Remove the windshield/fog light supports** on each side by removing the 2 allen head screws on each side. I would recommend an allen head socket rather than just a hex key, as these suckers were put on tight, likely with some sort of locktite fluid. Once removed, just let the fog lights and the bracket rest on your CAREFULLY PADDED AND COVERED front fender



5. **Pull the headlight nacelle forward** you will need to look inside the opening between the headlight nacelle and the aft chrome cover (the piece with the foglight switch), and snip the tie wrap that secures the wire bundles to the fork. This will then allow you to pull the nacelle forward and down just enough to reveal the two upper handlebar hold-down allen bolts.
6. **Loosen the two topmost handlebar hold down bolts** then, with a ratchet extension and the appropriate hex head socket, loosen but don't remove at this time, the lower handlebar hold down bolts from underneath. Note: You do NOT have to remove the tank-side chrome shroud that nestles into the headlight nacelle. Just leave it loosely in place and you will be able to move it around enough to get to those lower bolts, using a ratchet and long extension:

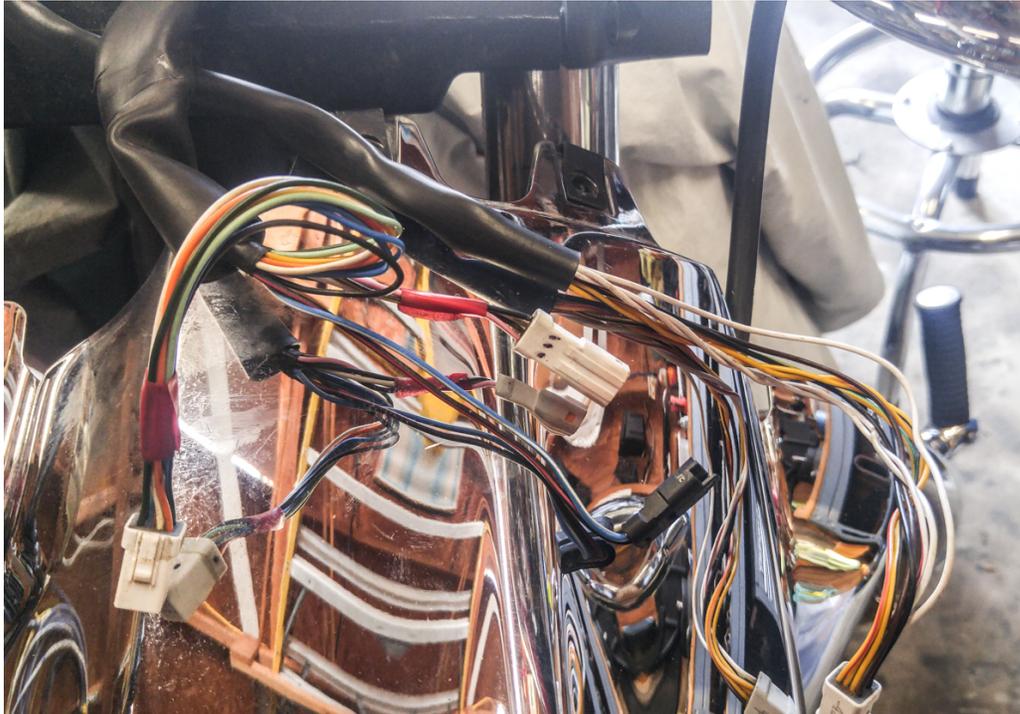


7. **Underneath the clutch handle assembly** remove the 2 small screws holding the black plastic cover for the wiring, then disconnect the 2-wire white plastic connector for the clutch switch.



8. **Remove the two star screws holding the clutch lever to the bar** (a helper here is handy to hold the assembly while you remove the screws), then remove the assembly from the handle bar and tie the assembly and clutch cable safely out of the way. Take particular note of the routing of the clutch cable to facilitate reinstallation.
9. **While a helper holds the brake lever and master reservoir** remove the 2 star screws holding the assembly to the handle bar, then remove and support with a tie wrap out of the way, so that the brake line isn't put into any stress.
10. **Clip the tiewraps that hold the handlebar wiring bundles** These will be found back underneath the headlight nacelle, and will reveal multiple white connectors (one black pair) for all the wiring going through the handlebar to the switchgear on each end of the handlebar.

11. **Carefully mark each multi-pin connector** to make sure each connector will be re-matched with its original corresponding connector. There are 2 such connector pairs on the left side (after first removing them, I taped the ends left on the bike both together for later orientation), and 4 connector pairs on the right side (one right side connector is black rather than the white color of the remainder, so it should be foolproof) I marked both sides of each connection with a different number of corresponding dots to insure getting the connectors back together properly.



12. **Unplug all the connectors for the wire bundles which feed through the handlebar** (each connector has a little catch which you can depress with a small flat blade screwdriver to release)

13. **With a helper, finish removing the 4 hold-down screws for the center handlebar clamp** and lift the handlebar free of the bike, along with the still-connected handlebar switch gear and cable clusters coming from the center bar opening.

14. **Set the handlebar on a wide sturdy workbench** then proceed to remove the internal wiring from the old handlebar



15. **Separate the left hand switch gear from handlebar** by removing the 3 star screws. When the two halves of the switch gear are free of the bar, use at least one screw to loosely connect them back together to protect the internal switches and the small wires connected from one half to another, then carefully feed the left-side wiring through the handlebar, pulling from the switch gear end, remove and set aside.



Note: On the LH side, while pulling the wire bundles through the handlebar, I discovered one small bundle that exited a break in the sheathing about 4-5 inches from the bar end. That separate bundle, and its connector, is actually pushed the OTHER direction (i.e., toward the handlebar end) and left inside there. I can only assume this is for one of the other models, or an option for speakers, etc. In my case, initially it seemed the connector was stuck inside the

handlebar, but finally I realized that some of the glue (looked like hot glue) used to glue the bar end to the bar, had dripped through a drilled hole and had glued the connector inside (or perhaps this was by design). A bit of judicious poking from the bar end opening and I was able to free up the connector and pull it out.



16. Feed the left hand wiring bundle into the new handlebar I recommend using a piece of household wiring “romex”. I just cut a piece of the bare copper ground wire from a romex roll, and fed it through the handlebar from the center until it came out the other end. Now, use some tape and tape the two connectors, one behind the other, to the wire, and carefully pull the wires through, helping at the switchgear end by pushing.



Pull the wire bundle pretty tight, so there is no slack left in the bundle at the

switchgear unit.

Assemble the switch halves back on the bar end and screw them together. Note that there is a hole drilled into the rider-side of the bar, the hole closest to the area where the bar diameter increases. This hole must mate with a “peg” that is integral to the rider-side half of the switchgear. This locates the switch gear at the proper place on the bar, and prevents it from turning once the assembly is tightened down. You won’t get a good fit until that pin is registered in the hole.

Finally, after securing all 3 screws, remove one at a time and put a dab of minimum strength locktite on the end and replace, so we don’t lose any fasteners down the road.

17. **Remove the right hand switch gear** as above. This operation requires a bit more finesse, but is by no means impossible. Once you remove the 4 star screws, you will find the two halves of the housing still want to stay pretty closely together. The two wire bundles are pulled very tightly into the bar, since there is minimal room inside the throttle housing. You will have to work a bit by pushing on the two bundles from the handlebar center, and pulling gently on the thicker of the two bundles (which is mostly connected to the rider-side half of the throttle clamshell housing). After a bit of coaxing, you will get the two halves to separate enough that you can turn the actual hand throttle about 180 degrees, separate the halves, and slide the hand throttle grip off the bar end.



Note that while the rider-side half of the throttle housing can now be pulled slightly away from the bar (but not completely, as there are cross wires going to the other half), the front half of the throttle housing contains the ride-by-wire throttle switch, which encircles the handle bar. Thus, removing the forward half

requires slowly pulling the two wire bundles together, through the bar, until finally the throttle switch housing can be fully slipped off the bar end, giving better access to the wiring bundles. As with the left side, once the throttle housing is free of the handlebar, assemble the two halves temporarily back together while pulling the remainder of the wire bundles to prevent damage to the internals of the throttle housing.

As described with the Left Side wiring bundle, there is an auxiliary small cable bundle and connector that just gets slipped into the outermost part of the handlebar, almost exiting the end. Again, I assume this for other (or YOUR) models, or future options. The existence of this extra cable does make pulling the other main cable bundles more difficult, so as soon as you have pulled 4-6" of the bundles through the bar, you will see this smaller bundle exiting from the center of the sheathing. As soon as you can get it free, pulling the other bundles will be easier.

18. Feeding the wire bundles through the right side bar is a similar process as described for the Left Hand side. There are more connectors on this side, so I used masking tape to tape each individual connector to the pull wire, taking care to add tape around the leading edge of the connector so it doesn't get caught on something going through.

Because of the thicker bundles, the task will be facilitated with a helper pushing the bundles from the throttle end as you pull on the pull wire from the handlebar center.

Don't get too carried away while pulling, be reminded that the front half of the throttle housing must pass around the handlebar end as you pull the wires through. Just keep working slowly but surely until you have all those wires pulled just about as tight as you can get without forcing, and the throttle housing halves can be seated in the proper spot. As with the left side, there is a locating peg on the inside, rider-side of the inner housing half, which has to fit into the mating hole in the bar.

Finally, of course, before joining the two housing halves with the 4 screws, you must reposition the throttle hand grip back in place. You just turn the grip to the open side to clear the electronic switch, then turn it 180 degrees to fit into place. You will know it is fitted correctly when you can feel the return spring tension in the appropriate logical position.

REASSEMBLING THE HANDLEBAR ASSEMBLY

Reassembly is pretty much the logical reverse of removal:

- a. Attach the handlebar back on the triple tree, and with an assistant holding the bar, sit on the bike and determine the optimum up-down position of the bars, then cinch down tightly the 4 bolts holding the bar in the center (don't forget Loctite)
- b. Re-attach the brake and clutch handles to the handlebar NOTE: When attaching the clutch handle, take care to not pinch the wire coming out of the assembly.. there is a small slot in the mating halves to accommodate the wire.
- c. Reconnect the 2-wire cable underneath the clutch handle housing
- d. Reconnect all the white (and 1 black) wire connections between the handlebar and headlight nacelle
- e. Refasten the wire bundles to the upper fork support with tie-wraps, just like you found them
- f. Tidy up the wire bundles instead the nacelle with a few more tie-wraps
- g. With an assistant's help position the headlight nacelle back in place (take note of clutch cable routing). The threaded clips on the nacelle go UNDER the tank-side chrome cover, and the 2 mounting tabs on each side of the nacelle go OUTSIDE the matching aft chrome cover
- h. Use the two screws that hold the windshield bag on (WITHOUT the bag) to temporarily connect the nacelle to the matching aft chrome cover (Later, after the side screws are secure, you will remove these and attach the bag).



- i. Remembering to place the black plastic sleeves on the UPPERMOST of the two bosses of the fog light/windshield bracket, swing the bracket up into place and attach the two hold down bolts on each side. This is where you will definitely need a helper to squeeze everything together.
- j. Now remove the windshield bag screws you temporarily used to hold the top of the headlight nacelle to the aft cover, and properly install the bag, remembering to include the two spacers between the bag and the nacelle
- k. Remembering the "spare" wiring you pushed into the handlebar, use a small rod or screwdriver in one of the vertical holes drilled in the handlebar to push that

wire down and out of the way, so it doesn't interfere with the long screw you will be using to secure the hand grip to the bar.

- l. Inspect the left side hand grip, and remove the little captive nut from the inboard, forward facing end of the grip. Slide the grip onto the handlebar (use a bit of glue as they did at the factory if you like). I decided the through-screw would be sufficient to hold the grip onto the bike.
- m. Peel back the rubber grip covering at the inboard end to reveal the hole for the attaching screw, push it through to the other end, then use a flashlight to line up the screw so it can go through the grip on the front side. Once the screw has been properly located, then slip the "captive" nut back into its indentation in the grip, and tighten the screw to secure the grip. Don't use locktite here, as the screw is pretty small, and the rubber grip covering will prevent the nut from falling out.

Now, go out and enjoy your new handlebar! If, after riding a bit, you feel the bar needs adjusting up or down, it is just a matter of removing the bar bag again, removing the 2 fog light/windshield support arm bolts on each side, pulling the headlight nacelle forward, and loosening the bar hold down screws as previously described.

Here is the finished job with the new "Beach Bar" I love the shape of the bar. Surprisingly, the actual reach of the bar is pretty much the same as the original stock bar, but with a significantly different angle for the wrists.

