



barrels  fun

# NIPPER SHOOTER ROD



## Installation Tips

### Kit Contents

#### 1. Nipper Shooter Rod (bare)

**NOTE:** Clip, Washers, and Springs are reused from original shooter rod

### Tools

- Flathead screwdriver
- Pliers
- (Optional - See "Preparing the Machine" section below) a Rag
- (Recommended) Work Gloves

### Recommended Viewing

Scan this QR code with your phone's camera to get a direct link to a helpful YouTube video by YouTuber "DashV" that walks through a similar shooter rod installation procedure and offers many helpful service tips for new pinball machine owners.

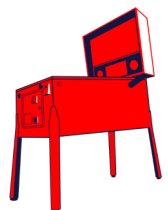


<https://www.youtube.com/watch?app=desktop&v=N9IAvbGuVVU>

### Preparing the Machine

#### 1. Remove the playfield glass

- Open the coin door
- Unlatch the lockdown bar
  - Lift upward on each of the two latches to the left and the right on the inside of the coin door and swing each catch arm free
- Lift the lock bar up and off of the machine and set aside while making sure the glass doesn't slide out on its own  
**CAREFUL - DO NOT LEAVE GLASS UNATTENDED. GLASS CAN SLIDE OUT OF CHANNEL AND SHATTER**
- Slide the glass slowly out of the glass channel towards the front of the machine, supporting its weight gently as you set it carefully aside  
**CAREFUL - DO NOT SET GLASS DOWN ON A HARD SURFACE. IF THE EDGE OF THE GLASS CONTACTS A HARD SURFACE, IT CAN SHATTER**



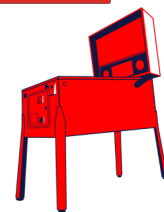
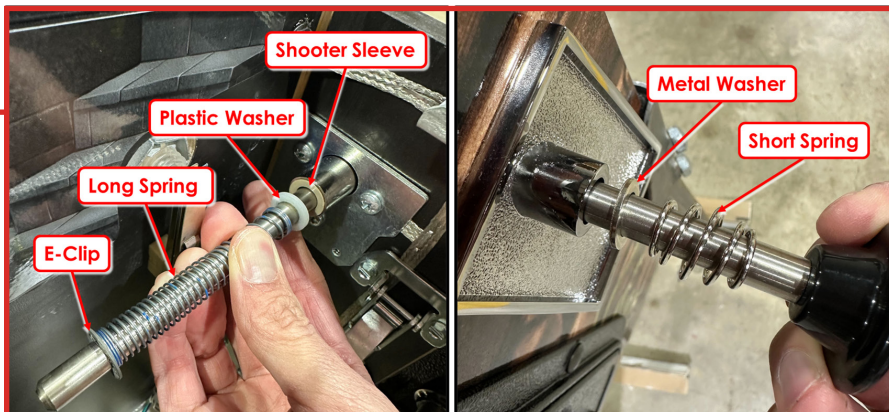
2. **Ensure all five (5) pinballs are removed or secured before lifting the playfield by, EITHER:**
  - a. Shoving a rag deep and securely into the ball trough exit to prevent the balls from falling out when the playfield is lifted, **OR**
  - b. **(PREFERRED METHOD)** Removing the pinballs from the machine. This can be accomplished using the **SERVICE MENU** (the buttons inside the coin door), by selecting:
    - i. **UTILITIES -> EMPTY BALLS**
    - ii. You'll then need to close the coin door to enable high power to the trough eject and auto launcher.
    - iii. The game will launch balls onto the playfield and you can gather them up until all 5 are collected.
3. **Power OFF the pinball machine and then unplug it from the wall outlet**
4. **Install the large plastic interior side art blade protectors that came with your machine to protect the art from accidental damage when lifting the playfield**
  - a. If this is your first time installing the art blade protectors, they may still be flat and/or rolled up
    - i. If so, you'll notice two long score/bend marks along their lengths
    - ii. You'll need to bend along these lines to form the protectors into shape so they will hang on the sides of the cabinets and over your inner side art blades
  - b. Plug can be saved in case the topper is removed in the future
5. **Carefully lift the playfield and rest it against the backbox/head**
  - a. If this is your first time lifting a pinball playfield, please go back and watch the video linked under RECOMMENDED VIEWING

## Removing the Original Shooter Rod

6. **(Recommended) Wear work gloves - tools can accidentally slip during this step**
7. **Remove the black rubber shooter rod tip**
  - a. Be careful not to damage the rubber; the tip is reused with your new shooter rod
  - b. Patience and a flat head screwdriver will be helpful for this. Pulling on the tip acts like a finger trap toy, so pushing from the back of the tip is recommended.
  - c. Using the screwdriver, push incrementally along the perimeter of the back edge until the tip eventually pops all the way off
8. **Remove the E-Clip retaining ring by gripping its center firmly with pliers and pulling**
  - a. Be careful not to damage the clip; it is reused with your new shooter rod
  - b. Keep a firm hold on the clip as they can be easy to lose
  - c. Hold the shooter spring in place as you remove the clip so the spring does not propel into the cabinet
9. **Slide the original shooter rod out from the front of the pinball machine, removing all springs and washers from it as you go**
  - a. The springs and washers are reused with your new shooter rod

## Installing the New Shooter Rod

10. **Slide the outer spring and washer onto your new shooter rod and slide the rod into the machine**
11. **Slide the inner washer and spring on the shooter rod inside the cabinet. The components are installed in the locations shown to the right:**



12. While compressing the shooter rod spring, re-install the E-clip retaining ring on the groove cut into your shooter rod until it clicks securely in place
  - a. Pliers can help, or the ring can be pressed in place with your thumb
13. Push on the black rubber shooter rod tip
  - a. Ensure it is FULLY seated or it may be damaged/cut when lowering the playfield

## Reassembling Your Machine

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14. Carefully lower the playfield back into playing position, being sure each playfield hanger hook is fully engaged on the receiver bar along the inside front edge of the cabinet
15. Remove the art blade protectors from the sides of the cabinet
  - a. These can be conveniently stored inside the cabinet by sliding in through the coin door and over to the right side (away from tilt bob)
16. Remove the rag from the ball trough entrance (if used) or replace all 5 balls into the playfield drain hole below the flippers
17. Carefully slide the playfield glass back into position
18. Replace the lock bar, being sure the glass is all the way up in its channel so the lock bar drops down fully into ready-to-play position so it can be re-latched
19. Open the coin door and re-latch the lock bar by swinging each latch into position to engage the lock bar and then pulling down on each latch until they snap in place
20. Plug in and power on your pinball machine!

## Technical Support

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If any issues are detected during the installation or checkout, please, first, double check all connections in the back box and, if the issue is not resolved, contact us for help! <https://shop.kollectfun.com/technical-support/>

(Scan this QR code with your phone's camera to get a direct link to the Technical Support page)

