

**The Royal Family:**  
**O. D. Jennings**  
**Little Duke**  
and  
**Duchess**

by  
**Rick Akers**



I believe the information provided in this manual is accurate, but I can NOT guarantee it.  
If you see something that appears to be incorrect, please notify me; [rick.akers1@gmail.com](mailto:rick.akers1@gmail.com)

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# Chapter 1 - Introduction

## Background Information

This is a stand-alone document detailing the Jennings Little Duke and to a lesser degree, the Duchess slot machines.

Even though I consider this to be a stand-alone document, the best way to use this document is as a supplement to the **“OWNER’S PICTORIAL GUIDE FOR THE CARE AND UNDERSTANDING OF THE JENNINGS BELL SLOT MACHINE”**. If you don’t have this book, I strongly suggest finding a copy. There is a lot of very useful information about Jennings slot machines in this book that I will not cover in this supplement. If you can’t find a “Jennings Pictorial Guide,” one of the other pictorial guides (Mills, Watling, or Pace) could be used for general descriptions on how a slot machine works. Their basic operation is pretty much the same.

I’ve had a Little Duke in my slot collection for at least the past 30 years and during that whole time, I have never had to do any work on it. Every now and then the reels don’t spin as they should and I lived with it mainly because I didn’t want to tear into the mech. It looked so different from a regular slot machine and it scared the hell out of me.

A while back, I decided it was time I learned how to work on my Little Duke. I knew there wasn’t any reference material out there, so I decided that while I’m learning how these things work, I’d try to write a service manual for it as well. I bought another Little Duke, to use as my tear apart machine, while my original Little Duke would remain intact, in case I needed something to refer back to. Just as I was about to start tearing things apart, my friend (Dave) that got me started in this hobby, called to remind me that he had a Little Duke sitting in pieces in a box. He has had it for almost as long as I’ve had my first Little Duke. He also mentioned he had a donor mech as well, if I needed extra parts. So, to make a long story somewhat short, I wound up with three Little Dukes and a donor mech. I decided to work on Dave’s mech first. It’s the only one that doesn’t have any of the side vendor linkage attached, so I figured it should be somewhat easier.

I used three Little Dukes and two Duchess slot machines to help me write this supplement. All three of the Little Dukes were earlier 1 cent machines with a single jackpot. Two of them have the Selective coin head and one has the smaller coin head. Two of the machines have gumball side vendors. I did NOT have the later “Improved” version of the Little Duke to look at or compare. If you own a later “Improved” Little Duke, keep in mind there probably will be slight differences between your machine and what is discussed and shown in this supplement.

The Duchess machines I used are a 5¢ machine with a small coin head and a 10¢ machine with the larger selective coin head. I did not have access to the early version Duchess with the round coin window.

For more historical information about Jennings slot machines including the Little Duke and the Duchess, I suggest finding a copy of Richard M. Bueschel’s two-volume book **“JENNINGS SLOT MACHINES 1906-1990”**.

The following two advertisement pages for the Little Duke and the Duchess were obtained from the spectacular International Arcade Museum. Their web site is: **[www.arcade-museum.com](http://www.arcade-museum.com)**

I want to thank **John Spina** for providing several high quality pictures and very valuable comments to this supplement. I want to thank **Charles Hoffman** for the pictures of his newly acquired “early” Little Duke that has the spinning window frame. I want to thank Guillet Stephane, in France, for providing pictures of the third version of a side vendor. I want to thank Dave Epperson for trusting me and letting me tear his Little Duke apart and rebuild it.

ANNOUNCING THE

# "LITTLE DUKE"

by Jennings

## A Small, Attractive Penny Play Jackpot with Automatic Payout

**J**UST think of it, the "Little Duke" will do everything its big brother, the Jackpot Bell, can do, yet it has about 40 per cent less parts. The mechanism may be quickly removed from cabinet by releasing two snaps. No screws or wing nuts to bother with. When you see the mechanism you'll marvel at its compactness and simplicity!

The operation is the same as the large Jackpot Bells. It has an automatic payout, delivering from 2 to 20 coins on certain combinations. It has a jackpot and reserve feature. The jackpot may be adjusted to hold from 100 to 250 coins. The reserve holds about 60 coins. The jackpot quickly fills as all coins go to jackpot, unless there are less than 50 coins in payout tube, in which case, tube first fills to 50 coins capacity, then jackpot fills. When jackpot is filled, coins then go to tube which holds 90 coins. When tube is filled, coins overflow to cash box. Cash box capacity is 2500 pennies.

Such important improvements as Return Coin, Split Coin Chute, New Payout Slide Assembly, Anti-Bumping and Anti-Cheating Devices, Slug Rejector, etc., are standard equipment. The "Little Duke" weighs 50 pounds, about half the weight of the standard jackpot bell.



### SPECIFICATIONS

#### MADE IN 1c PLAY

Height—22 in. (over-all)

Width—13 "

Depth—9½ "

Weight—50 pounds

Equipped with new "reel card"  
symbols: Stars, Half-Moon, Sun,  
World, etc.

*Fruit "Reel Cards"*  
*furnished upon request.*

**Now Ready for Immediate Shipment**

WIRE YOUR ORDER AT ONCE

Operator's Price—Sample Machine **\$50.00**—Plus Tax

**O. D. JENNINGS & COMPANY** *Manufacturers*  
4309-39 West Lake St. **Chicago, Illinois**



## A ROYAL RECEPTION

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Here are the two coin-operated machines acclaimed by operators to be the most outstanding achievements in the industry.

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### "LITTLE DUKE"

Unquestionably the most popular and profitable penny play Jackpot Vender.

It gets the play because  
it's different



"Little Duke" Vender

• • •

### The "DUCHESS"

Another New Sensation

#### Small

Only 18½ in. high. Just half again as high as your telephone.

#### Convertible

When you get a "DUCHESS" you have both Bell and Vender. Extra front panels furnished without additional cost to change from Vender to Bell, or vice versa.

#### Quick Filling Jackpot and Reserve . . .

A Jackpot and Reserve principle that will instantly make a hit with you.

#### Low in Price

Here is the most pleasant surprise of all. One important reason why the "DUCHESS" is the sensation of the times.

• • •

*Write or wire for complete details and prices.*



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**O. D. JENNINGS & COMPANY**  
MANUFACTURERS

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## Chapter 1 - Introduction

### Special Tools Needed

Other than the usual array of regular and long shank screw drivers, pliers, wrenches, and other tools needed to work on a slot machine, there are a few special tools you will need for working on the Little Duke.

#### A pair of spring hooks

These make working with springs much easier in cramped spaces. I bought a pair from Dave Berten at [MrSlot1@aol.com](mailto:MrSlot1@aol.com). For additional information about springs for the Little Duke, see the Appendix.

#### A spanner wrench



Figure 1-1

An adjustable spanner wrench, with 3mm pins, is needed to dismantle the spinning disc bundle. (Details later in the book.) I bought this one off eBay. It had larger pins and I carefully ground them down to fit.

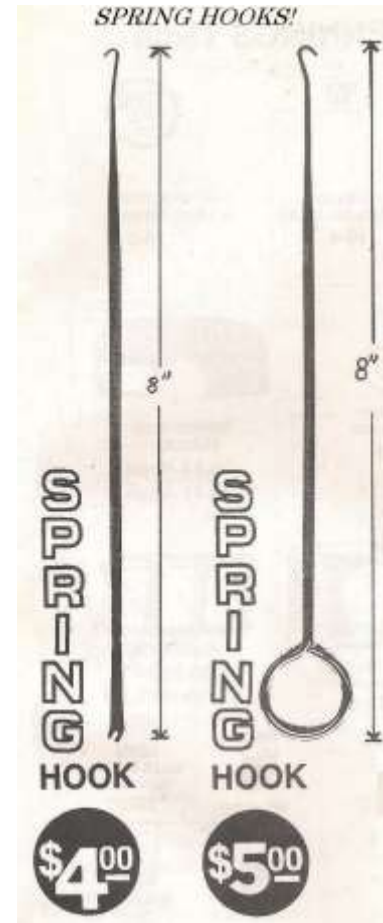


Figure 1-2

#### A thin stamped metal wrench with a $\frac{3}{4}$ " or 19mm opening



Figure 1-3

The thin wrench is needed to dismantle the spinning disc bundle. (Details later in the book.) I found this one on eBay. This wrench needs to be very thin. About the same thickness as the  $\frac{3}{4}$ "/19mm head it will go on. Most forged wrenches are too thick.

## Chapter 2 – General Operating Instructions

### Mechanism Removal

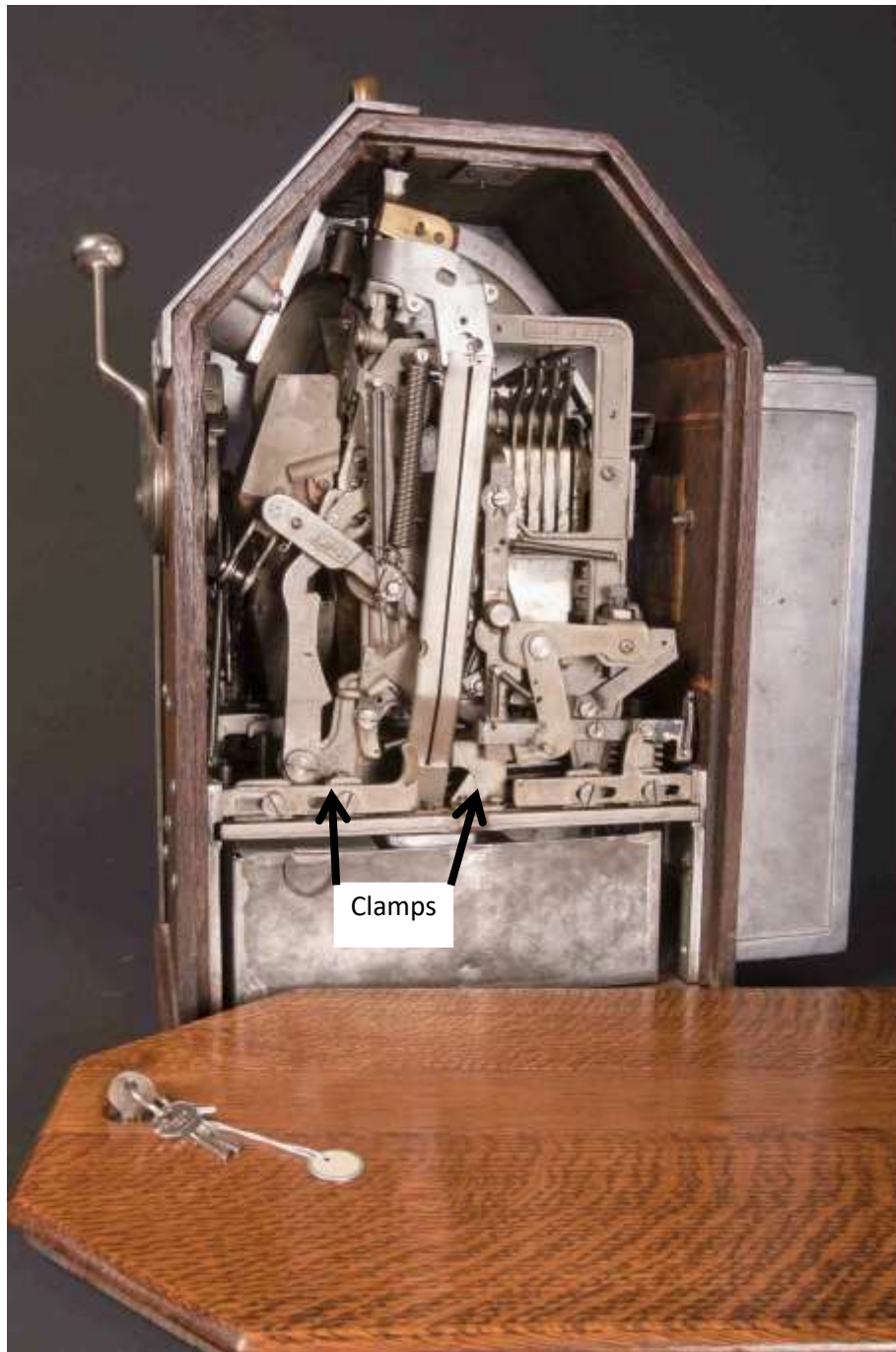


Figure 2-1

Once the back door is removed, the mechanism is held in place, inside the cabinet, by two mechanism retaining clamps located towards the bottom of the mechanism, just above the cash box. Squeeze these two clamps inward to release the mechanism and pull out. These two retaining clamps originally had springs attached so they would slide back to an outward “locked” position. It seems to be somewhat common that these springs are missing.

## **Chapter 2 - Introduction**

### **Mechanism Assemblies and Their Basic Functions**

A Little Duke mechanism isn't all that different than a regular "three-reeled" slot machine. It just looks different. Once you start studying the operation of a Little Duke mechanism, you'll see its operation is essentially the same. Obviously, the big differences are the spinning discs instead of spinning reels.

### **Setting the Slot Machine Reels**

With a three-reeled slot machine, it's fairly easy to manually position the three reels for any winning combination. While in the cabinet, insert a coin and pull the handle through the release cycle. As soon as it goes into the unwind cycle, stop the clock fan from spinning, stopping the operation of the machine. Then, you can position the three reels where you want them and then release the fan to complete the unwind cycle.

With the Little Duke this can be a bit difficult to accomplish with the mechanism still in the cabinet because the clock fan and spinning discs are at the very front of the mechanism. They're almost impossible to reach. This can, however, be easily done with the mechanism out of the cabinet.

With the mechanism out of the cabinet, drop a coin in the coin chute and pull down on the operating control arm cycling the mechanism through the release cycle. As soon as it goes into the unwind cycle, stop the clock fan from spinning, stopping the operation of the machine. Then, you can position the three disc where you want them and then release the fan to complete the unwind cycle.

Obviously, looking at the front of a Little Duke, the working symbols on the disc line up at the "12 O'clock" position. The first disc to stop spinning is the smallest "inner" disc and the last disc to stop spinning is the largest "outer" disc. You read the disc from the bottom up.



## Chapter 2 - Introduction

### Loading Coins into the Mechanism

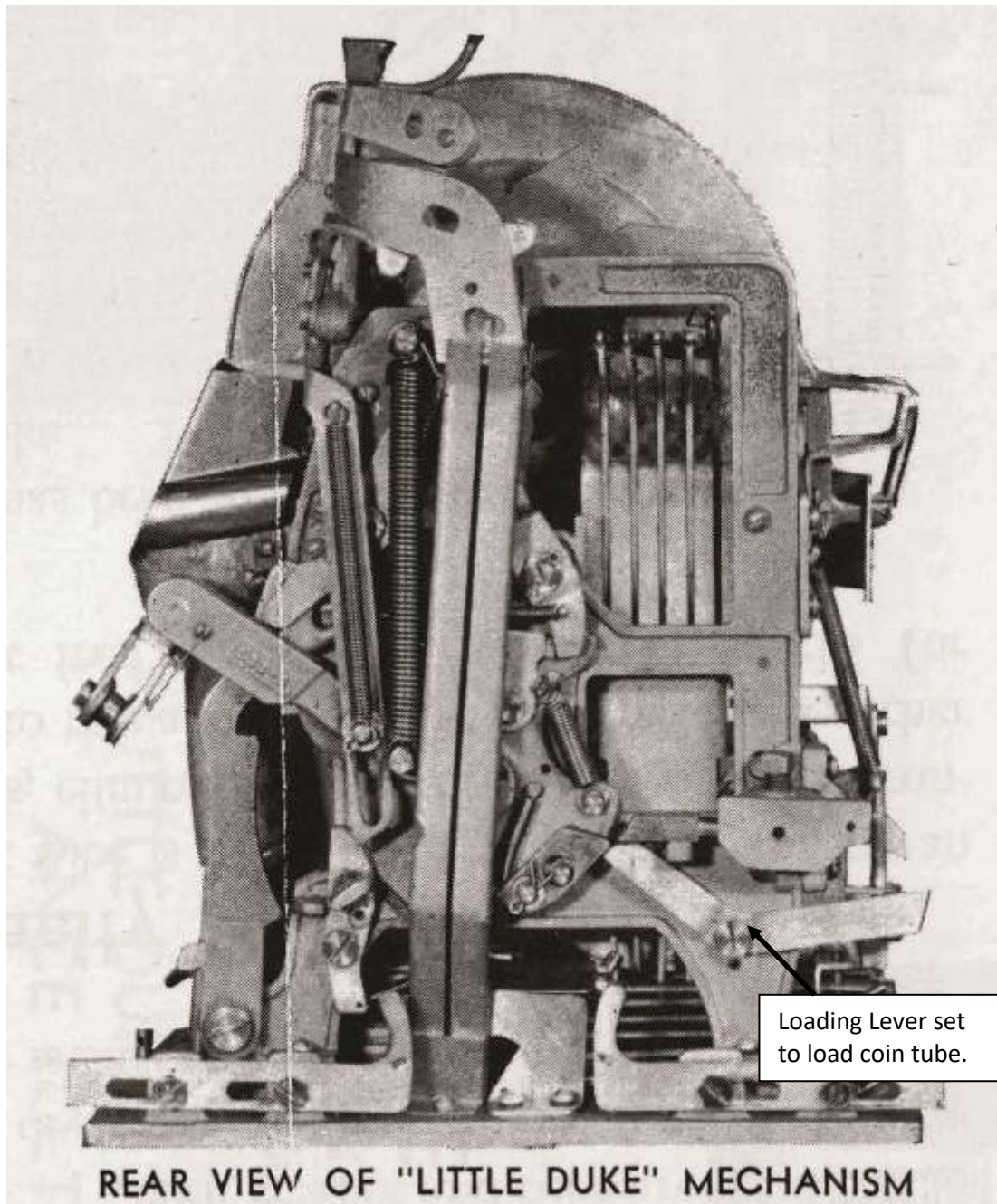


Figure 2-2

The easiest way to load coins is to use the coin loading lever on the back of the mechanism. Lowering the end of the loading lever re-positions the trip dog so that the mechanism will not go through the normal cycle of operation when the handle is pulled. (See picture above) This can be done with the mechanism in or out of the cabinet. You can insert a coin using the coin head on the cabinet or the coin chute on the mechanism and pull the handle. It's the easy way to load the coin tube, but it sure is slow.

## Chapter 2 - Introduction

### Loading Coins into the “Single” Jackpot



Figure 2-3

The jackpot is filled via the jackpot/reserve runway sitting above the jackpot.

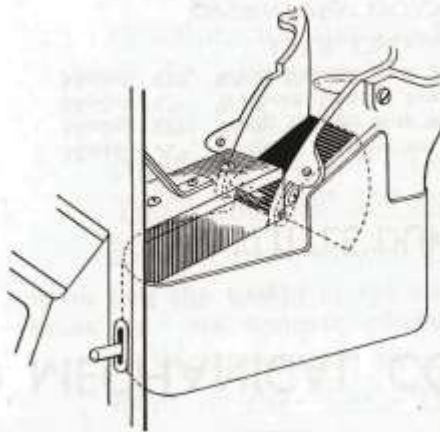
To manually fill the jackpot, move reserve lever out of the way, opening the runway allowing coins in the runway to drop into the jackpot. When the jackpot has been filled, allow the reserve lever to drop back into place and then add more coins to the reserve runway.

The amount of coins needed to fill the jackpot can be changed by adjusting two screws on the jackpot door.

## Chapter 2 - Introduction

### Loading Coins into the "Improved" Jackpot

#### *The Improved "Little Duke" Now Has a Marvelously Simple Jackpot Feed*



It is with considerable pride that we now announce the Improved Jackpot Feed. Experienced operators will recognize the simplicity and practicality of this new feature. The jackpot is fed from the overflow of the check tube. Naturally there is no worry about tube "running dry." The tube must be filled before coins (or checks) go to jackpot. When both jackpot and tube are filled checks (or coins) automatically divert to cash box. No complicated working parts—the operation is simple and fool-proof.

Figure 2-4



Figure 2-5