

Jennings Sportsman Manual

Converted to text and PDF format
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INSTRUCTION FOR THE PROPER CARE AND MAINTENANCE
OF THE JENNINGS SPORTSMAN

As soon as you have unpacked your Jennings Sportsman Table, set it up on a counter or high stool in order to make it easier to fasten on the legs. The legs are held in place by two long bolts at each of the four corners.

When you have the legs fastened securely, place the machine on a level section of floor and SEE THAT IT IS PERFECTLY LEVEL. There are levelers or adjusters at the bottom of each of the four legs. It is a good idea to carry a small level to use in setting up the table. To make sure the table is perfectly level, if you do not have a level with you, place a marble on the glass top immediately over the "Skill Shot" hole and let it roll to the bottom. If the marble has a tendency to go to either side, raise or lower the adjusters until the marble goes down in a straight line.

Figure 1 illustrating the complete Sportsman Table shows the location of the various different units. Refer to this illustration to find proper location of the different units mentioned hereafter:

C A U T I O N !

READ THIS CAREFULLY before opening the cover of the Sportsman! To prevent bending the Ball Shooter, use the following procedure:

- (1) Turn lack in front releasing Playing Board. PULL OUT BALL SHOOTER and THEN raise Playing Board. Be sure you have Shooter out before trying to raise board or when returning Playing Board to its original position.
- (2) Lift Playing Board as high as it goes and place long Rod in Position to keep it up. It is not necessary to hold up the Board with your hand as the rod holds it firmly until released, making easy access to the inside of the machine.
- (3) Remove screw which keeps sliding board from moving in shipment. You will find a tag attached to the screw.
- (4) The Jennings Sportsman comes to you set for check play, unless specified "Cash Play" on order. This means that only checks, as supplied with the machine will go into the tube and Payout and wining combinations. All cash played into the machine goes direct to the cash box. (To set machine to play and pay cash see instructions on Page 12.) To load the Payout Tube with checks, slide them in one at a time, through the opening on the right side of the coin chute. Pull the Coin Slide all the way out as by doing this you move rake-off arm out of the way and clear the top of the check tube. Make sure that the checks lie flat in the tube. By looking through the slits or holes in the brass Payout Tube you can see if the checks are lying flat. Should they not lie flat, take the blade of your pocket knife and agitate them throught the slits or holes until they lie properly. Load the machine to the capacity of tube, which is 110 check.

- (5) Place all ten marbles on Wood Ball Return Board.
- (6) Remove Top Glass. (See Instructions below.) Remove paper from ball in Anti-Tilting cup and replace ball in cup.
- (7) Return Playing Board to its proper position by releasing Bracket which holds it up. BE SURF TO HOLD BOARD FIRMLY to keep it from dropping down too fast. BE SURE, also, to pull Shooter out when lowering Board. DO NOT let board rest on Shooter as this will bend it and put it out of line.
- (8) Now lock the machine end it is all ready for play.

TO REMOVE TOP GLASS

Lift Playing Board and let it set on Bracket as previously explained under headings (1) and (2) on the first page of these instructions. The front section of moulding over the glass is held in place by two screws. Remove these screws from the bottom of Playing Board and the piece of moulding will lift right off. Return Playing Board to its proper position as explained under heading (7) on this page. BE SURE to pull Ball Shooter out so as not to bend it. Glass will now slide out easily. To replace glass, reverse the operation.

THE ANTI-TILTING DEVICE

To prevent cheating by means of tilting the table, the Sportsman is equipped with a posit e yet simple Tilting Device. Under the glass, at the right hand side of the Instruction Card you will notice a cup. When the table is tilted, the ball rolls off the post and drops into the cup, which breaks the payout circuit, preventing a payout even though a paying combination is made. On the next play, the ball is raised to the proper position on the post, and the payout circuit is again closed.

Before shipment, the cup which elevates the Anti-Tilting ball is regulated so that it will fall back slowly after the ball has been elevated to the post in the center of the cup. If for any reason it is necessary to again regulate this action, this can be done by means of the set screw at the bottom of the cylinder immediately under the Anti-Tilting cup. It will be necessary to raise the Playing Board to get at this cylinder. Turning the set screw to the left causes the cup to drop faster; turning it to the right causes the cup to drop slower. The set screw is provided with a lock nut, which must be loosened before turning the set screw.

If the cup drops too fast, the ball may not rest on the center post due to jarring when operating coin slide.

About every 60 days, remove the Anti-Tilting Device cup and clean it free from dirt, grit, and other foreign substances. Put just a few drops of oil on the moving part so that it reduces the friction. To remove the cup loosen the two screws at the bottom which holds it in place.

THE PAYOUT MECHANISM

The pay off mechanism of the Sportsman is part electrical and part mechanical. The advantages of having a mechanical element-are obvious. This eliminates the possibility of any series of contacts becoming stuck or short circuited and burning out the Battery, Electro magnets, etc. Varying the thicknesses of coins may at times cause binding in the payout mechanism and a strictly electrical payout would prevent any agitation, whereas a combination mechanical and electrical payout permits agitation and consequent release of the binding. Moreover, by making the payout partly mechanical we have eliminated the necessity of a motor. On the Sportsman there is no motor to burn out. The construction of the Sportsman Payout Device actually prevents payout of the entire tube.

The balls entering the proper combinations on the playing field set up an electrical circuit which permits the player to get the correct award ONLY when he presses the lever or handle on the right hand side of the machine. By taking the payoff mechanically the player has automatically broken the circuit so that it cannot possibly pay-again until another winner appears.

The principle of operation of the payout device is easily understandable. By referring to the illustration on Page 5, Figure 2, you will be able to follow the explanation easily.

As the checks leave the coin chute they drop into a tube about six and one-half inches long, known as the payout tube. This tube leads directly to the Payout Disc immediately underneath. The Payout Disc is the exact thickness of three checks and has in it four holes. Each hole will perfectly accomodate the proper size checks. This Disc is movable and revolves when a winner appears and the payoff is taken. Thus it will be seen that the Sportsman pays off in units of three.

Let us suppose that the player has put the balls in the proper holes to win three checks or tokens. This is what happens: Contacts are now made ready for taking the payout, but the circuit is not yet completed until the lever at the right of the machine is pressed down. This lever is directly connected to the Payout Rack Gear Segment. The moment the player starts to press down on the lever to take the payout and by so doing turns the Payout Rack Gear Segment, he permits the points on the Payout Circuit Breaker to make contact. This oontact sets the Payout Mechanism in motion.

First of all, when the contact is made, an electrical current flows through the small electromagnet adjacent to Payout Stop Lever A. This draws the Payout Stop Lever down toward the Electromagnet. At the opposite end of each Payout Stop Lever you will notice a Contact Point. The Small Electromagnet, by drawing the Payout Stop Lever down, causes the contact point at the opposite end of the Stop Lever to make contact with another contact point. As soon as these two points make contact an electrical current flows through the Large Electromagnet which

draws the Upper Payout Release Pawl toward the Large Electromagnet and away from the Payout Rack. At the same time the lower Payout Release Pawl goes up against the Payout Rack, preventing it from slipping back. All this happens simultaneously.

As the player continues to press down on the lever he moves the Payout Rack forward toward the Payout Stop Levers. The Payout Rack, you will notice is connected to the movable Payout Disc by a gear. As the Payout Rack moves forward, it turns the Payout Disc so that the first hole in the Disc passes underneath the Payout Tube and cuts off three checks, When the Payout Rack has gone forward as far as it can go, which in this case is up to the Payout Stop Lever A, the circuit is broken, releasing the contacts on the other end of the Stop Lever. This causes the Upper Payout Release Pawl to move toward the Payout Rack and keeps the Payout Rack from moving forward any further. At the same time, the Tower Payout Release Pawl moves away from the Payout Rack, thus permitting the Rack to return to its original position. When the player releases the lever, thus permitting the payout Rack to return to its original position, the Rack turns the Payout Disc and the three checks that were cut off are dropped into the Payout Cup.

Similarly, when a six winner appears, Payout Stop Lever B is drawn to the proper Electromagnet; when a nine winner appears, Payout Stop lever C is drawn to the Magnet; and when a twelve is won', Payout Stop Lever D is drawn to the Magnet. The Payout Rack goes just as far as the correct Payout Stop Lever, and as the Rack moves it revolves the Payout Disc the proper distance to pay out the correct number of checks.

Toward the far end of the Pnyout Rack is the Payout Circuit Breaker. This, you will notice, is not making contact as long as the Payout Mechanism is not is use. However, as soon as the player turns the Payout Rack Gear Segment the slightest bit when he has a, winner the Payout Circuit Breaker is in proper contact. As soon as n payout is made and the Payout is in its original position, the circuit is again broken. This considerably lengthens the life of the batteries because there is no more contact after the payout is made. A winning combination could be left overnight or for weeks, yet no current would be consumed. Neither is any current used on a winner before the payout is made. The only time current is used is at the actual moment of taking the prayoff. This lasts for only a fraction of a second.

The gap on the Payout Circuit Breaker is properly adjusted at the factory. The correct distance is approximately 1/32" or the thickness of two business caxds. If it becomes necessary to adjust the gap, do so by means of the Payout Circuit Breaker Adjusting Screw. Be sure the lock nut is tight before placing the machine in operation.

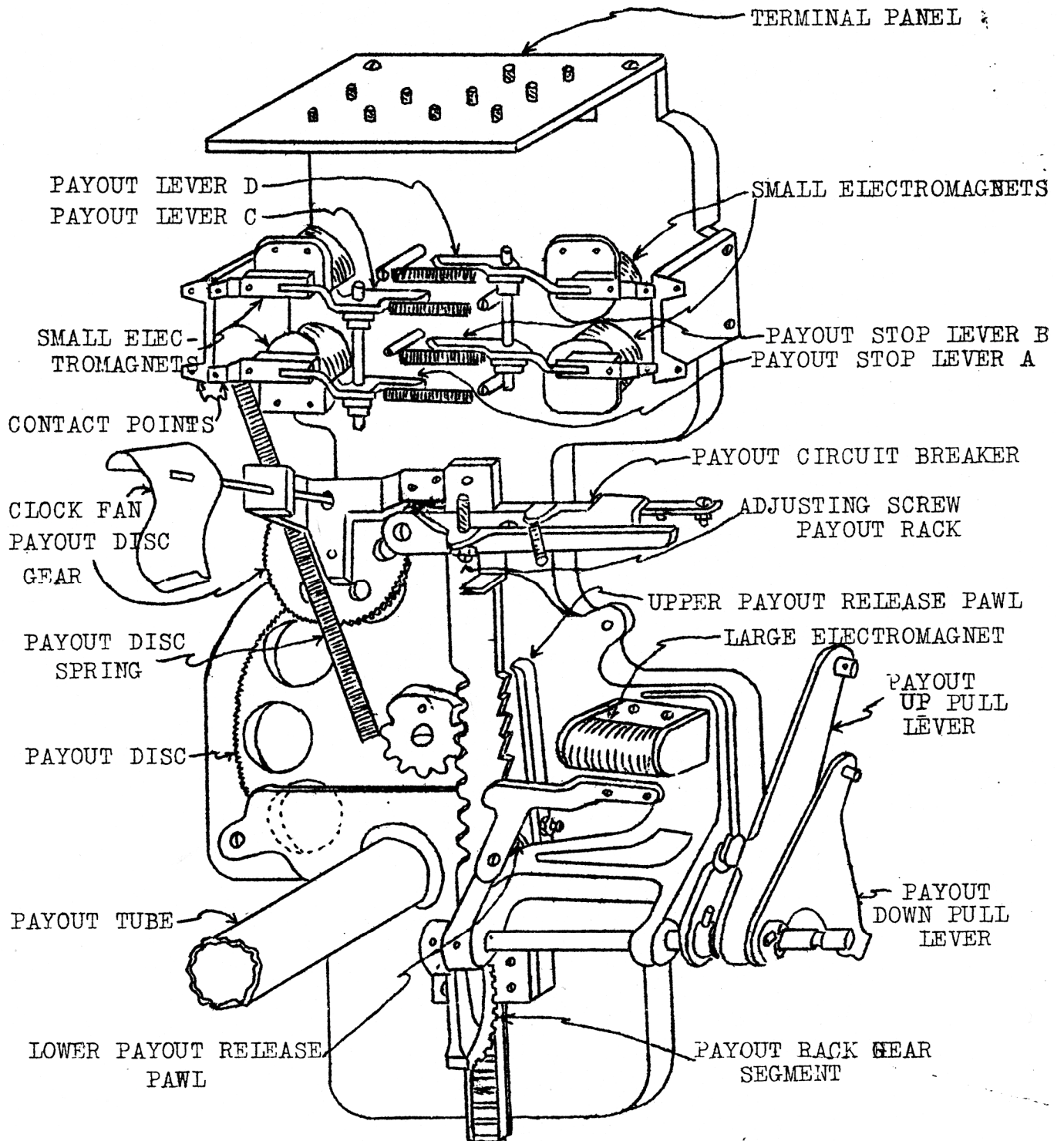


FIGURE 2

THE PAYOUT MECHANISM

CHECKING THE PAYOUT

In checking the payout, should any trouble occur, FIRST OF ALL, see that there are sufficient checks in the Payout Tube.

The next step is to test the Batteries to see that they are the proper amperage and not burned out. The Jennings Sportsman will not operate properly if the combined amperage of the Batteries is less than 30 amperes. Therefore, it is highly advisable for you to buy yourself a good, dependable amp-meter for the purpose of testing the batteries. Should they at any time fall below 30 amperes they will have to be replaced.

Next, see that the metal ball rests on top of the post in the AntiTilting Device cup. If the ball falls off during the course of play the circuit will be broken and the machine will not pay off even when a winner appears. If the ball falls off during the course of play the circuit will be broken and the machine will not pay off even when a winner appears. If the ball falls off too easily it is probably because the table is not perfectly level. After you have made certain that the table is level and the ball still falls off it may be necessary to use a little sandpaper or emery cloth on the top of the post. Another solution would be to use a smaller metal ball.

A possible yet simple cause of payout trouble may be the result of leaving the checks in the payout cup at the bottom of the machine. Should the player win the high awards a couple of time and press down on the lever at the right of the machine, but neglect to take the checks from the payout cup, these checks may pile into the Payout Disc and keep the machine from paying out. Make certain that the payout cup is empty, thereby eliminating the possibility of a jammed Payout Disc. At the same time, look carefully for checks which may be standing up on end at the bottom of the Payout Tube. Be sure that the checks lie flat in the Tube. This may be seen by looking through the slits or holes in the Brass Payout Tube.

The next thing to look for is loose or broken wiring. Carefully check over all the wiring, tighten all loose connections, and if any broken wires are found, splice them together and solder them if possible. Wrap a small piece of friction or adhesive tape around any spliced wires to prevent possible short circuits.

Examine the Fuse carefully to see that it is in good condition, and replace it in the proper receptacle.

Assuming that the Batteries, Anti-Tilting Device, Payout Cup, wiring and Fuse are all as they should be, that the machine is level and that there are enough checks in the payout Tube. Let us next test the coils or as they are commonly known Electromagnets, located on the Payout Mechanism. There are five of these.

Each Electromagnet has two wires leading out from the coil. To test, first connect a separate wire to each terminal of the Batteries. Place the two ends of these wires on the wires leading

from the coil. Be sure a good contact is made on the bare wire. This completes the circuit and the Electromagnet will then operate, drawing toward it the proper lever. Should any of these Electromagnets fail to work they will need to be replaced.

The five Electromagnets that are on the under side of the Playing Board are part of five Relay Switches. The four outside ones are connected to the Payout Mechanism and control the quantity of checks that are paid out. The one in the center is connected to the Anti-Tilting Device. These relay Switches should be "closed" or making contact as long as the payout has not been taken or the machine tilted. These Relay Switches are reset by the Sliding Board when another coin is played into the machine. See Figure 3 below for illustration of Relay Switch in "closed" position.

As soon as the pay off is taken and the circuit broken by the Payout Rack touching the Payout Stop Lever, the Electromagnet in the Relay Switch draws Lever A (shown in Figure 3 below) toward it and by so doing "opens" the Switch and separates the two Contact Points. This particular combination cannot pay again until another coin or check is played into the machine. Similarly, when the machine is tilted the center Relay Switch "opens" and breaks the circuit to the Payout Mechanism so that the machine cannot pay out until another coin or check is played.

Test each of these five Relay Switches by first testing the Coil or Electromagnet and then test the contacts carefully to see that they are touching when the payout has not been taken. If these contacts do not touch adjust them so that they do, but see that they are separated when Lever A is against the Electromagnet. If the Relay Switch does not open when the Payout Rack makes contact with the Payout Stop Lever it will not permit the Payout Rack to be brought back to normal position. In other words, the machine will not pay out. Therefore, if Relay Switch will not open when Lever A releases Lever B, make sure that Lever B is not catching or sticking on some other point. On the next play, when the coin or check is inserted, the Sliding Board moves forward and resets the Relay Switches

Should the Sliding Board Fail to reset the Relay Switches, loosen the lock nut on the Adjustment for Closing Relay Switches, make the necessary adjustment and tighten the lock nut.

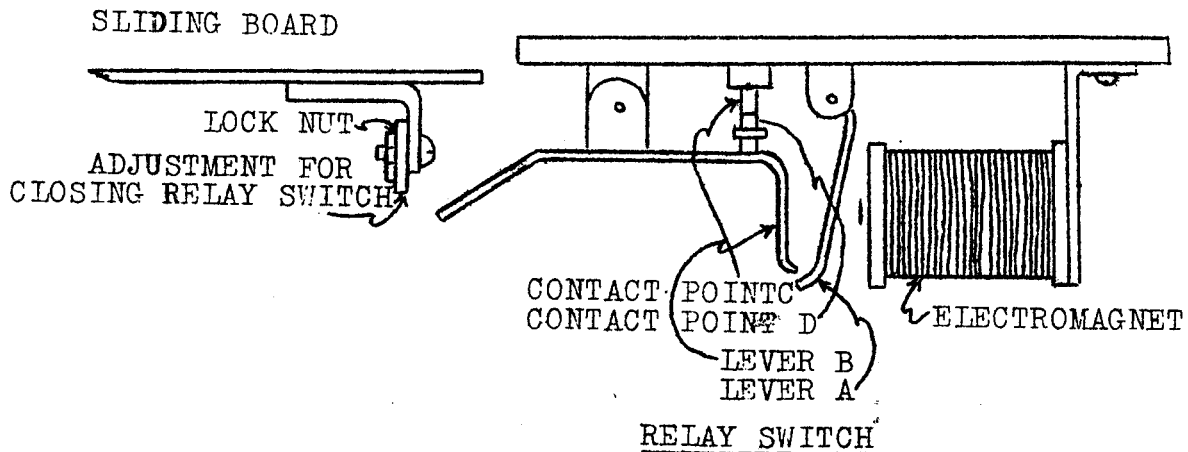


FIGURE 3

The next step in checking the payout is to try some actual winning combinations to see which one fails to pay off. Remove the top glass as explained on Page 2. Raise the Playing Board and let it rest on the Rod. Close the center Relay Switch with your finger. Place balls in one of the winning combinations. Nothing will happen as yet because there is still no contact. Press down on the lever on the right side of the cabinet, or if you prefer, turn the Payout Rack Gear Segment to which this lever is connected. If the pay off is working properly the correct number of checks will come out of the Payout Cup. By working slowly you can watch the action of the entire payout.

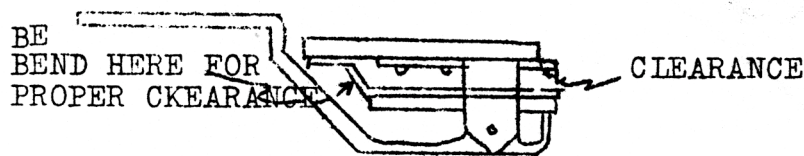
The moment the Payout Rack Gear Segment is turned the slightest bit you will hear a click, This is made by the action of one of the Small Electromagnets drawing Payout Stop Lever A and the large Electromagnet drawing the Payout Release Pawl. These two work simultaneously By turning the Payout Rack Gear Segment the least bit you made contact on the Payout Circuit Breaker and this completed the circuit on the two Electromagnets. If the Small Elecomagnet draws Payout Stop Lever A and the Large Electromagnet

fails to draw the Upper Payout Release Pawl, examine the contact points at the other end of the Payout Stop Lever. These Points should make contact when the Small Electromagnet draws the Stop Lever. The contact that is made by these two contact points completes the circuit and the Large Electromagnet. Therefore, it is important that these two points make proper contact.

As you continue to turn the Payout Rack Gear Segment slowly you will see the Payout Rack moving forward and at the same time turning the movable Payout Disc to which it is by a gear. When you have turned the Payout Rack Gear Segment as far as it will go until the Payout Rack makes contact with Payout Stop Lever you will hear another click. This is one of the Electromagnets on the under side of the Playing Board drawing the Relay Switch open and breaking the contact. This contact remains broken until another coin or check is played. The Payout Disc, you will notice, has turned only far enough to release the proper number of checks.

After you have checked the first Payout and noticed how it operates, check the others in the same manner. Should any of them fail to work, try lightly pressing the balls down against their contact points. The position of the Playing Board when raised up in the air may keep one or two balls from making proper contact. This condition, however, will be automatically remedied when the Playing Board is in its proper position. The weight of the balls themselves makes the contact.

Figure 4, at the top of Page 9, is an illustration of the Ball Contact Unit that is used on the Sportsman. There are fourteen of these units riveted to the metal plate beneath the Playing Board. When the ball goes into the proper hole, the weight of the ball closes the circuit on that particular Unit. The clearance of the Ball Contact Unit, when there is no Ball in position should be about the thickness of one or two business cards, as indicated on the sketch.



Ball Contact Unit

Figure 4

Should any payout combination still refuse to work properly even after you have made sure all the proper holes have been filled, examine the contacts on the Ball Contact Units. If the weight of the ball does not make contact on any Unit, use a long nose pair of pliers and bend the lever as indicated to make the contact. Be careful not to bend it too much or it will make contact even when there is no ball in place. DO NOT TAMPER WITH THESE BALL CONTACT UNITS UNLESS EVERY OTHER REMEDY HAS FAILED TO CORRECT PAYOUT TROUBLE These units are properly adjusted at the factory and there is very little possibility of their being out of order.

After you have determined that one of the winning combinations refuses to pay out, you can easily locate the source of the trouble by testing with a Trouble Lamp. One of these Lamps can be made very easily for a total cost of about fifteen cents. First, secure a radio pilot light and two lengths of wire each about three feet long. Solder the end of one of these wires to the brass threaded part of the pilot light. To the center bottom contact of the pilot light solder one end of the other piece of wire, making sure that there is no contact between the two wires. Your Trouble Lamp will be similar in appearance to the illustration below, Figure 5.

TROUBLE LAMP



FIGURE 5

You are now ready to test one or more of the payout circuits underneath the Playing Board.

First, remove the top glass and raise the Playing Board as previously explained. Remove the Wood Ball Return Board. Fasten the free end of either one of the wires of your Trouble Lamp to the metal wired part of the Fuse. This end will remain in this position throughout the test. Test your Trouble Lamp by touching the other wire to the Battery terminal opposite to the one to which the Fuse block is connected. It should light up.

Be sure that all five of the Relay Switches are closed. Place balls in the "Skill Shot" hole and in each of the holes of the combination you wish to test. Press down on these balls lightly with your finger to insure proper contact of the Ball Contact Unit. To make doubly sure that the Ball Contact Units are making proper contact, insert a match stick or toothpick underneath the part that the ball rests on. It is important that these Ball Contact Units make good contact in order to conduct a successful test.

Suppose that the six Payout or Rabbit combination is the one you wish to test. After you have put the balls in the winning combination you are ready to go ahead.

Making sure that one end of your Trouble Lamp is still fastened to the Fuse Block, place the other end on the 6th terminal from the left, directly to the left of the center or Anti-Tilting Relay Switch. This terminal has a brown wire leading from it right to the Relay Switch. Trouble lamp should light up. If lamp does not light up at any one Point during the course of this test it is an indication of a break between the last point that the lamp lit up and the point where it did not light up.

Next place the free wire on the Anti-Tilting Device Relay Switch at the point where the brown wire from the 6th terminal touches the Relay switch. Then touch the wire to the opposite terminal of the Relay Switch.

Follow the brown wire to the "Skill Shot" Ball Contact Unit and touch your Trouble Lamp to each terminal of the Unit. Keep following the brown wire until it meets the first ball Contact Unit of the combination you are testing. In this case it would be the third one that the brown wire touches after the "Skill Shot" Unit, or the one that has a green wire on it. In the meantime, you will have touched your Trouble Lamp to the brown wire at every point that it comes in contact with the Ball Contact Units.

Now follow the green wire to the other two Ball Contact Units in the Rabbit Combination. As you do this, touch your Trouble Lamp to both terminals of each Ball Contact Unit to make sure that the current is passing through. Continue to follow the green wire to where it touches the Relay Switch at the extreme right. Touch your Trouble Lamp wire to each terminal of this Relay Switch and then keep following the green wire to where it comes to the Terminal at the bottom of the Board. The green wire leads from this Terminal at the bottom of the Board. The green wire leads from this Terminal through the cable to the terminal Panel at the rear of the Payout Mechanism. (See Figure 2 on Page 5.) Touch your Trouble Lamp wire to the green wire where it makes contact with the Terminal at the bottom of the Board and also where it makes contact on the Terminal Panel. Now follow the green wire through the Terminal Panel to where it makes contact on one of the Small Electromagnets or coils, touching your Trouble Lamp wire to the point of contact.

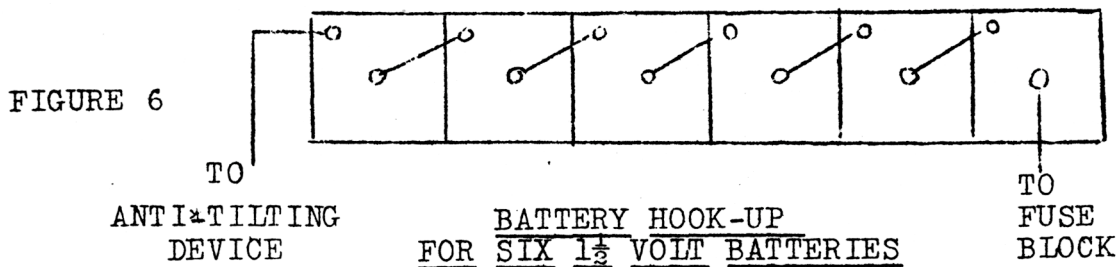
You have now made the complete circuit of the six or Rabbit combinations on the Playing Board. Each of the other winning combinations can be tested in exactly the same manner, simply by following the color of the wire which belongs to any one combination.

In giving the Payout Mechanism proper care, see that all moving parts are oiled at intervals of about six months. Use a light machine oil that does not gum, Use the oil sparingly, being careful not to drench anything or to cause any short circuits.

It is a good idea every 30 days to use a little emery paper on all the contact points to be sure that they are making perfect contact..

Particular care should be taken to see that all wires to moving parts are free from kinks, etc.

Be sure all of your contacts are tight, especially those on the Batteries. When replacing Batteries connect them as shown in Figure 6 below.



When moving the Sportsman from one location to another, remove the Fuse from the lower receptacle and place it in the top receptacle. This will prevent burned out Batteries. When the machine is again set up and leveled, replace the Fuse in the wired receptacle.

Should players fail to receive all ten balls, caution them to pull Coin Slide all the way out. Coin slide must be pulled ALL THE WAY OUT to deliver the balls properly.

The Sportsman is designed to operate on 6 to 7 $\frac{1}{2}$ volts. When connecting new batteries be sure they are connected in series and NOT in parallel. The correct battery hookup is illustrated on Page 11, Figure 6. Should the batteries be connected to deliver too heavy a load the Fuse will blow out.

The average player will soon become proficient enough to average approximately 50% payout. This percentage is great enough to appeal to the sporting instincts of the players, yet it is small enough to earn a good profit for the machine. The highest possible winner with ten balls is twenty-seven tokens. This combination may be made by putting one ball in the "Skill Shot" hole, three in the "Partridge" holes, three in the "Pheasant" holes and three in the "Rabbit" holes. The player, however, must take each payout as it appears.

The following equipment is furnished loose with each Sportsman in addition to those parts that are fastened down.

- Four legs with adjustment screws attached
- Four aluminum castings to go over the legs
- Eight Acorn-Headed Bolts
- Twelve White Balls
- Two Hundred Special Checks
- Two sets of Keys
- Four buttons for non-paying holes
- One plunger spring for steel balls

Check this list and see that you have received all the parts shown. This is all the equipment you need to operate your Sportsman for some time.

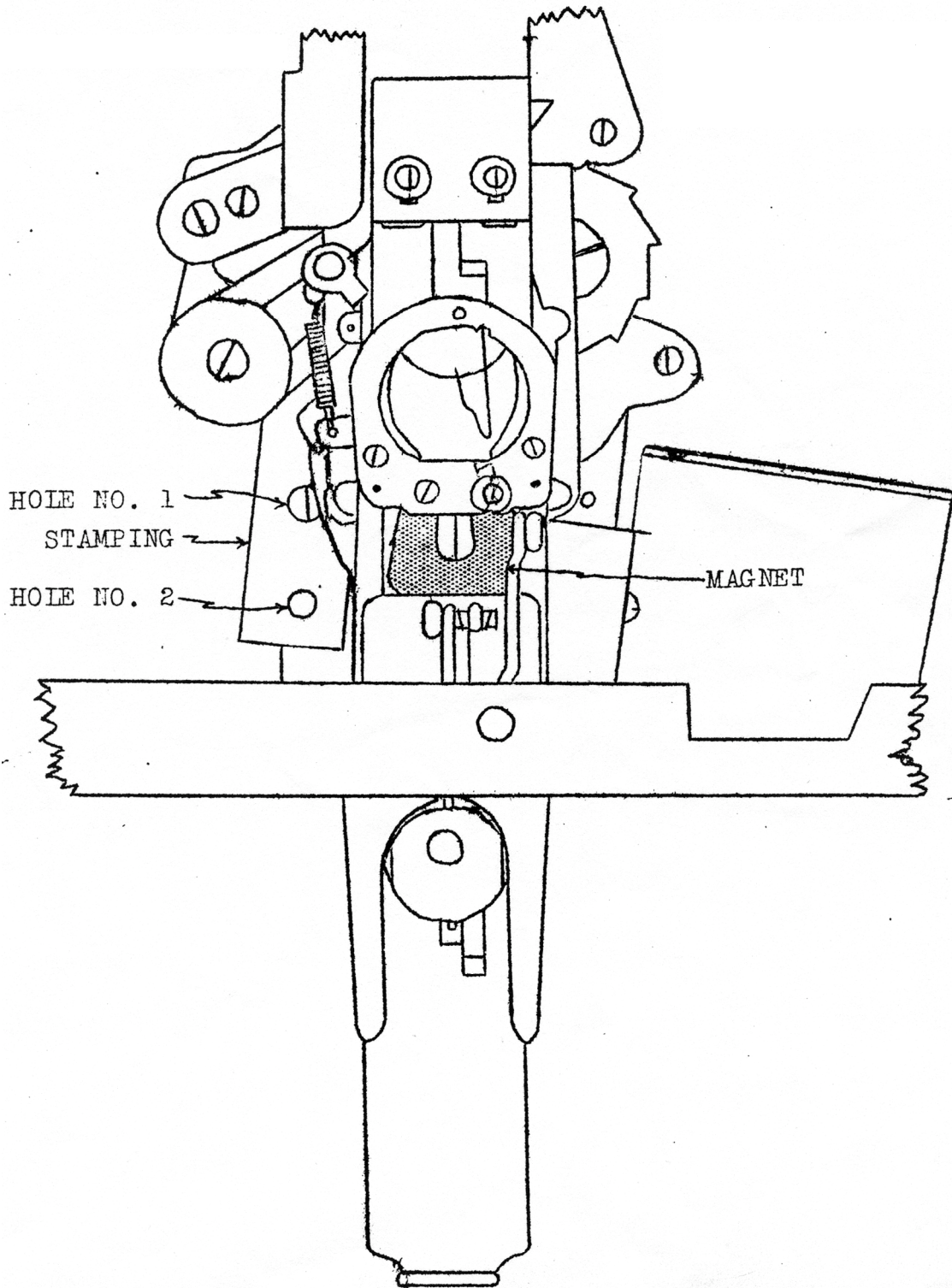
TO SET SPORTSMAN FOR CASH PLAY

Lift up PlayingBoard so it is supported by Rod.

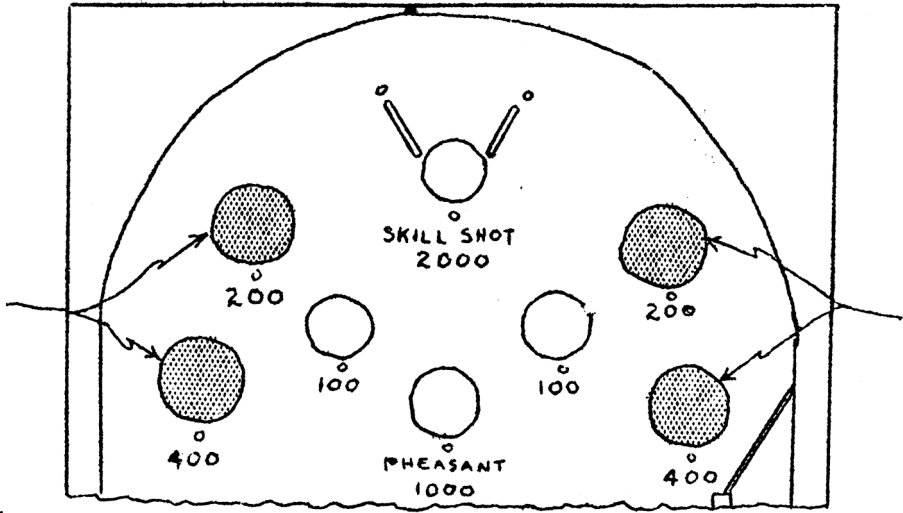
Remove screw from Hole No. 1 as shown on sketch. Push Stamping forward until Hole No. 2 occupies same position as previously occupied by Hole No. 1. Replace screw.

Replace brass Magnet on Coin Chute with small black Magnet you will find tacked on to the side of the cabinet. See sketch for position of Magnet.

To set for check play, reverse the procedure.



If you find that players are putting too many balls in the non-paying holes, cover them up as shown in Figure 8 below.



buttons

buttons

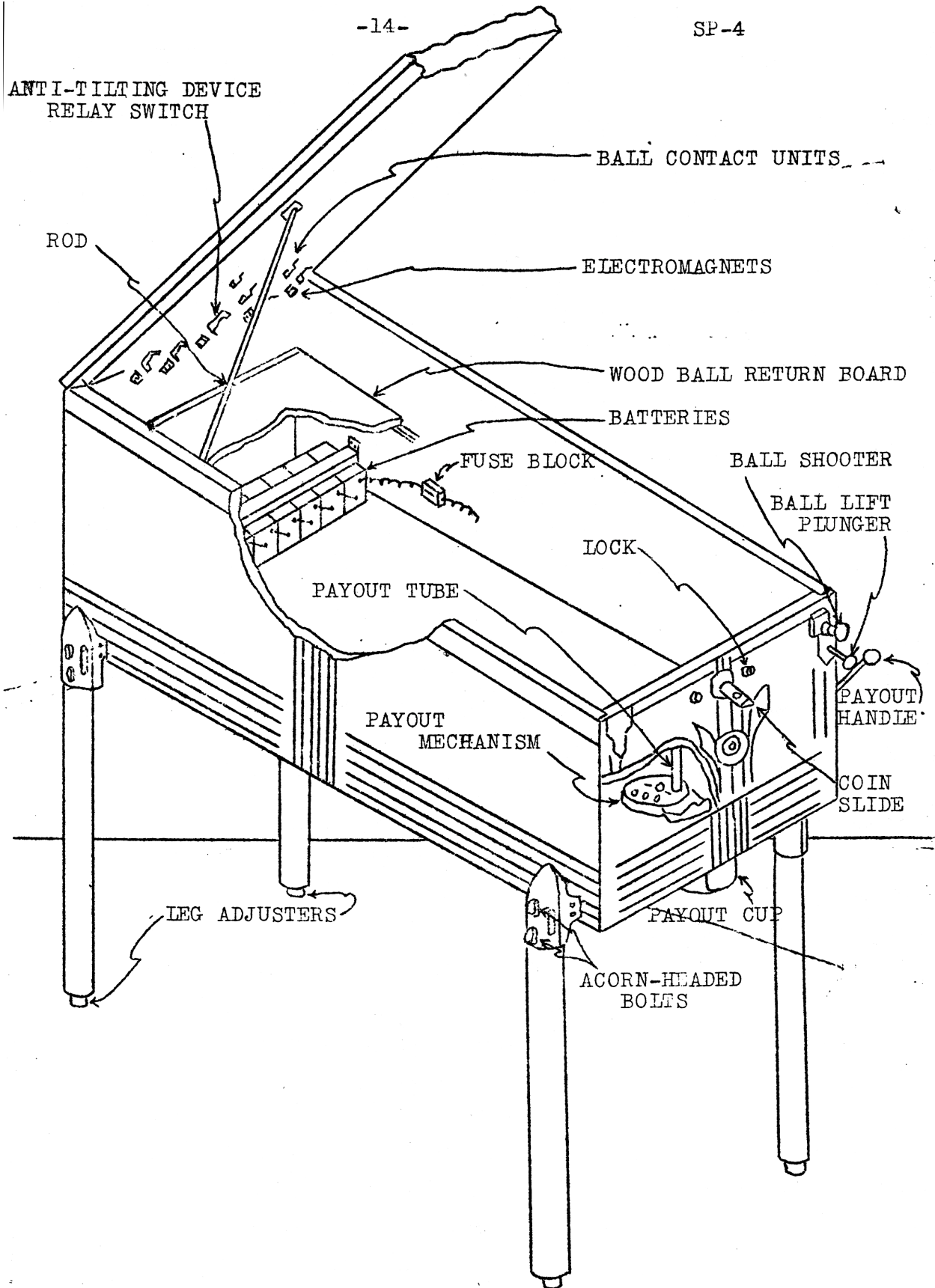


Figure 1 CUT-AWAY VIEW OF THE SPORTSMAN