# HAPP CONTROLS 

## Electric / Manual Coin Counter Part Number 80-1050-00 \& 80-1050-PL Operations Manual


happlontrols.com
Revision 1.1

Congratulations on your purchase of the Happ Controls Coin Counter.
Please fully read these operating instructions prior to your first use of this product.
The Happ Controls Coin Counter is a high quality, rugged piece of equipment and if the instructions outlined in this manual are followed it will provide many years of trouble free operation.
After unpacking your new Happ Controls Coin Counter please verify that all items listed are enclosed.

See Figure 1 and the packing list following.


Figure 1

## Packing List:

1: 1 Piece Coin Counter
2: Spare Parts Contents
1 Piece Rubber Feed Wheel Happ PN. 80-1076-569
2 Pieces Pinion Gear Happ PN. 80-1082-021
1 Piece Planetary Gear
3: 1 Piece Crank Handle for manual operation
Happ PN. 80-1099-1016
4: 1 Piece Coin Outlet With Ring
Happ PN. 80-1087-137
5: 1 Piece Coin Outlet Cover
6: 1 Piece each three size coin tubes ( $\$ 0.25, \$ 0.10, \$ 0.05$ )
7: 1 Piece AC Power cord
8: This document (Not shown)
See pages 3 \& 4 for exploded diagram and complete parts list.
If all items are not included please contact customer service at 1-888-BUY-HAPP(289-4277) or 847-593-6130 and ask for Customer Service. Please have your invoice number and customer number ready.


Page 3

## REPLACEMENT PARTS FOR HAPP CONTROLS COIN COUNTER

| Ref. \# | Part Number | Description |
| :---: | :--- | :--- |
| - | $80-1066-00$ | Blue Coin Tube \$.05 |
| - | $80-1064-00$ | Gray Coin Tube $\$ .01$ |
| - | $80-1065-00$ | Green Coin Tube \& $\$ .10$ |
| - | $80-1055-00$ | Orange Coin Tube $\$ .25$ |
| 194 | $80-1209-00$ | Orange Coin Tube <br> for Golden Dollar |
| 004 | $80-1053-004$ | Cover |
| 005 | $80-1101-00$ | Plate Tooth |
| 006 | $80-1056-00$ | Handle |
| 010 | $80-1069-010$ | Hinge |
| 013 | $80-1059-013$ | Screw for Handle \& Foot |
| 014 | $80-0057-014$ | Rubber Foot |
| 021 | $80-1082-021$ | Pinion Gear |
| 028 | $80-0046-028$ | Cone |
| 029 | $80-1083-029$ | Rotation Bushing |
| 031 | $80-1070-031$ | Bracket |
| 033 | $80-1089-033$ | Roll pin |
| 039 | $80-1139-039$ | Shaft Pin |
| 045 | $80-1056-045$ | Guide Bracket Slide Arm |
| 046 | $80-1037-046$ | Knob |
| 054 | $80-1063-054$ | Bushing |
| 082 | $80-1089-082$ | Upper Star Wheel |
| 084 | $80-1102-084$ | Gear for Star Wheel |
| 088 | $80-1096-088$ | Star Wheel |
| 090 | $80-0065-090$ | Lever |
| 091 | $80-1098-091$ | Spacer Pivot for Lever |
| 092 | $80-0065-092$ | Bushing |
| 093 | $80-0065-093$ | Pin |
| 094 | $80-0047-094$ | Spring |
| 096 | $80-1058-096$ | Meter Old Style |
| 113 | $80-1061-113$ | Count Stop Arm |
| 116 | $80-0049-116$ | Adjustment Spring |
| 117 | $80-1061-117$ | Spring for Count Stop A |
| 120 | $80-0065-120$ | Nut |
| 123 | $80-0065-123$ | Screw |
| 126 | $80-1053-126$ | Housing |
| 127 | $80-0059-127$ | Coin Guide |
| 129 | $80-0048-129$ | Knob |
| 132 | $80-1087-132$ | Screw |
| 137 | $80-1087-137$ | Coin Outlet w/ Ring |
| 139 | $80-1087-139$ | Plastic Ring |
|  |  |  |


| Ref. \# | Part Number | Description |
| :--- | :--- | :--- |
| 147 | $80-0050-147$ | Plug Adapter |
| 148 | $80-1039-00$ | Toggle Switch |
| 149 | $80-1038-149$ | Power Cord |
| 161 | $80-0052-161$ | Screw |
| 175 | $80-1097-175$ | Condenser |
| 176 | $80-1092-176$ | Motor |
| 505 | $80-1100-505$ | Plate |
| 509 | $80-1106-509$ | Plate |
| 519 | $80-1085-519$ | Feed Shaft |
| 520 | $80-1084-520$ | Reducer Gear |
| 522 | $80-1080-522$ | Gear |
| 532 | $80-1054-532$ | Drive Belt |
| 541 | $80-0051-541$ | Mounting Plate |
| 543 | $80-0052-543$ | Guide Arm |
| 547 | $80-0053-547$ | Protective Cover for Gears |
| 548 | $80-0053-548$ | Spring |
| 550 | $80-1090-550$ | Plate |
| 552 | $80-1137-00$ | Spring |
| 555 | $80-1078-555$ | Nut |
| 563 | $80-1073-563$ | Shaft |
| 564 | $80-1074-564$ | Bushing |
| 565 | $80-1138-565$ | Pin |
| 567 | $80-1075-567$ | Large Washer |
| 568 | $80-1077-568$ | Rubber Wheel Washer |
| 569 | $80-1076-569$ | Rubber Feed Wheel |
| 572 | $80-1081-572$ | Bushing |
| 575 | $80-0052-575$ | Spring |
| 587 | $80-1056-587$ | Meter Cover |
| 625 | $80-0054-625$ | Housing Cover |
| 628 | $80-0055-628$ | Shaft |
| 667 | $80-0056-667$ | Adjusting Lock Nut |
| 682 | $80-1051-682$ | Adjusting Screw |
| 1003 | $80-1069-00$ | Cover |
| 1006 | $80-1099-1006$ | Crank Handle |
| 1016 | $80-1095-1016$ | Shaft for Star Wheel |
| 1017 | $80-1086-1017$ | Arm Entering for Star Wheel |
| 1018 | $80-105-1018$ | Meter |
| 1028 | $80-1083-1028$ | Lever |
| 1035 | $80-1071-00$ | Gear Box |
| 2019 | $80-1086-2019$ | Gear |
| 2025 | $80-1053-2025$ | Complete Adjustment Assy |
| 2003 | $80-1053-2003$ | Cover With Hinge |
|  | 8 |  |

## GENERAL INFORMATION:

The Happ Controls Electric / Manual Coin counter is a quality rugged piece of equipment and will provide many years of reliable operation. The instructions in this manual should be followed to assure continued peak performance. This product is designed to operate at 120VAC 60 Hz .

## Features:

- Capable of counting a wide range of coin sizes.
- Heavy duty metal coin tray and base (Model 80-1050-00)
- Durable plastic coin tray and base (Model 80-105-PL)
- Programmable stops at 20,25,40,50,100,200 \& infinity (Continuous).
- 5 Digit resettable counter.
- Reversible motor assists in clearing jams.
- Average speed counts between 1,200-1,500 coins per minute.


## Controls:

Please refer to Figures $2 \& 3$ for the following.

A: Diameter Set
B: Thickness Adjust
C: Feed Wheel Adjust
D: Feed Wheel Adjust Lock Nut
Five Digit Resettable Counter

Feed Wheel
Mode Select Switch

- Sets diameter of coins to be counted
- Adjusts for thickness of coins to be counted.
- Sets height of Feed Wheel from surface of Exit Ramp.
- Locks Feed Wheel Adjustment.
- Total number of coins counted. May be reset to zero By depressing button on left side of counter.
- Wheel that ejects coins out of counter.
- Modes are ON (RUN) in left position, OFF is in center position, REV (Reverse, used to Clear jams) in right position. This is a momentary action switch to the right. The switch will return to the center position when released from the right most position.


Figure 2

Five Digit Resettable Counter


Figure 3

Page 6

## Setup:

Please note that this a coin counter only, not a coin sorter/counter. If coins of different sizes are put into the counter at the same time you may have different denomination coins counted as the same coin (Smaller coins than counter is set for) or the machine may jam frequently (Larger coins than the counter is set for).
Attach the coin outlet with ring to the counter. This is accomplished by removing the two screws located on the front surface just below the coin exit ramp. See Figure 4.

Figure 4


After removing the screws position the Coin outlet w/ring and secure with the two screws removed above. See Figure 5.


Figure 5

Page 7

Next insert one coin of the type to be counted into the Diameter Set area. This is accomplished by loosening the Diameter Set knob (Turn counter clockwise), insert the coin type to be counted between the Diameter set knob and the Coin stop (Small raised area to the left of the Diameter Set knob with radius) and then allowing the Diameter Set knob to return to the left, it is spring loaded. Then simply re-tighten the Diameter Set knob by turning it clockwise. See Figure 6.


Figure 6
Next adjust for the thickness of the coin. To do this place one coin of the type to be counted in the Counter table area. There is an area of the coin hopper area that is shiny chrome. Slide the one coin you placed in the counter table area between the platter and the lower edge of this chrome area just before the point where the coin would be grabbed by the Feed Wheel. See figure 7. If the coin will not go under the chrome part of the wall surface then turn Thickness Adjust knob counter clockwise until the coin will slide under the Chrome section.


Figure 7

When making the Thickness adjustment, setting the gap too large will allow for more than one coin to get between the chrome piece and the platter on the coin counter and will cause a jam condition.
On the other hand if this adjustment is set too narrow then coins will not be able to pass under the chrome piece and thereby be ejected from the coin counter by the feed wheel. Optimum adjustment is where one coin can slide between the chrome piece and the platter but not enough that you can get two coins under the chrome piece either stacked or offset from each other (Shingled).

Next the Feed Wheel will need to be adjusted. Refer to Figure 8.


Figure 8
(Plastic Cover removed for clarity)
Plug the power cord into the receptacle on the back of the Coin Counter (Make sure mode select switch is in center OFF position). Set the Count Lever to Infinity (Sideways 8) by pressing the Count set lever down and then sliding it all the way towards the front of the coin counter see Figures 9 \& 10.

Loosen the Feed Wheel Adjust Lock Nut by turning it counter clockwise. Then turn the Feed Wheel Adjust knob all the way clockwise until the feed wheel is raised all the way up. Move the mode select to the RUN position and drop the coin into the platter area. Turn the Feed Wheel Adjust Knob counter clockwise until the coin is ejected from the Coin Counter. Do this a few times to make sure the coin is ejected consistently. Turn the Feed Wheel Adjust Lock nut clockwise until it is tight up against the Feed Wheel Adjust Knob. This locks the Feed Wheel Adjust knob into the set location.

If the Feed wheel height adjustment is not performed correctly the life of the Feed Wheel may be decreased (set down too far) or the coins may not be ejected properly (set too high).
This completes the setup for the type coin to be counted.
Page 9

## Use:

To use the coin counter Plug the power cord into the receptacle on the rear of the coin counter. Set the number of coins to be counted by means of the Count Lever. Push the lever down and then slide to desired count for each cycle of the coin counter. At the end of each count this lever needs to be pressed down again to enable the counter for the next cycle. See Figure 9 \&10.


Figure 9


Figure 10
NOTE: The Crank Handle must be removed to use the Coin Counter in electric mode. This is a safety feature to avoid injury from the Crank Handle being spun by the motor.

After setting the number of coins place the coins in the hopper (cover) and start the Coin Counter by moving the mode switch from the OFF to the RUN position. The Coin Counter should begin to run and eject the coins. If a coin jam does occur most times it may be cleared by moving the mode switch from the RUN position momentarily over to the REV position. This process may need to be repeated a couple of times to completely clear the jam. Once the jam is cleared return the mode switch to the RUN position and the Coin Counter will resume where it left off. To just do a bulk count move the Count Lever over to the infinity (sideways 8) position and once started the Coin Counter will run continuously.
To operate the Coin Counter manually disconnect the power cord. Install the Crank Handle. To install the Crank Handle. Slide the Crank Handle over the Crank Handle Shaft. Depress the chrome button in the center of the shaft part of the Crank Handle (See Figure 11 \& 12). Slide the Crank Handle onto the Crank Handle shaft until it bottoms and then release the chrome button. To operate follow the same procedure as for electric operation.
To remove the Crank handle from the coin counter, reverse the steps outlined above for installation.


Crank Handle shaft located on right side of Coin Counter

Figure 11


Hand Crank
Handle Installed

Figure 12

Happ Controls Electric/Manual Coin Counter

