

# DINOSCORE

FIVE STAR REDEMPTION  
8835 SHIRLEY AVENUE  
NORTHRIDGE, CA 91324

# DINOSCORE TECHNICAL RESOURCE MANUAL

## Table of Contents

Table of Contents .....	2
1. INSTALLATION .....	3
THEME CONFIGURATION CHART .....	9
TO INSTALL THE GUN: .....	10
TO UNDO THE GUN: .....	11
PARTS LIST FOR GUN .....	13

# DINOSCORE TECHNICAL RESOURCE MANUAL

## 1. INSTALLATION

1.1 **FACTORY INSTALLED:** If this version software was installed in the controller as received from the factory, skip to section 2; PROGRAMMING.

1.2 **UPGRADE:** If your unit is being upgraded with this version of software, please read the following instructions carefully.

Record all vend values, target values, and counters on a piece of paper. These values will be lost when the new IC is installed and replaced with the factory default information (see 1.3 below) . Previous values must be reentered, if different.

Turn off power and replace the CPU IC as shown by the instructions included with the IC. Make certain the IC is oriented correctly with the dimple on the IC aligned toward the JP10 connector. Failure to do so will destroy the IC. Be sure to cautious of static discharge that could damage the IC or the controller.

Follow the instructions below to understand the new features and re-enter the Vend and target values.

1.3 **FACTORY DEFAULTS:** This software is equipped with a table of values that will be loaded into the vend value and target values locations. All counters will initialize.

MODE	VALUE	DESCRIPTION
001	0	COINS FLIPPED
002	-	VENDS OUT
003	-	N/A
004	1	ATTRACT TIME ON
005	150	ATTRACT TIME OFF
006	30	THEME DELAY TIME
007	4000	VEND 1
008	6000	VEND 2
009	2000	VEND 3
010	500	VEND 4
011	500	VEND 5
012	500	VEND 6
013	500	VEND 7
014	1000	VEND 8
015	1000	VEND 9
016	500	VEND 10
017	1500	VEND 11
018	500	VEND 12
019	50	VEND 13

## DINOSCORE TECHNICAL RESOURCE MANUAL

020	100	VEND 14
021	75	VEND 15
022	0	VEND 16
023		TARGET 1 POINTS
024		TARGET 2 “
025	SEE	TARGET 3 “
026	PAGE 10	TARGET 4 “
027		TARGET 5 “
028		TARGET 6 “
029		TARGET 7 “
030		TARGET 8 “
031		TARGET 9 “
032		TARGET 10 “
033		TARGET 11 “
034		TARGET 12 “
035		TARGET 13 “
036		TARGET 14 “
037		TARGET 15 “
038		TARGET 16 “
039		

## 2. PROGRAMMING

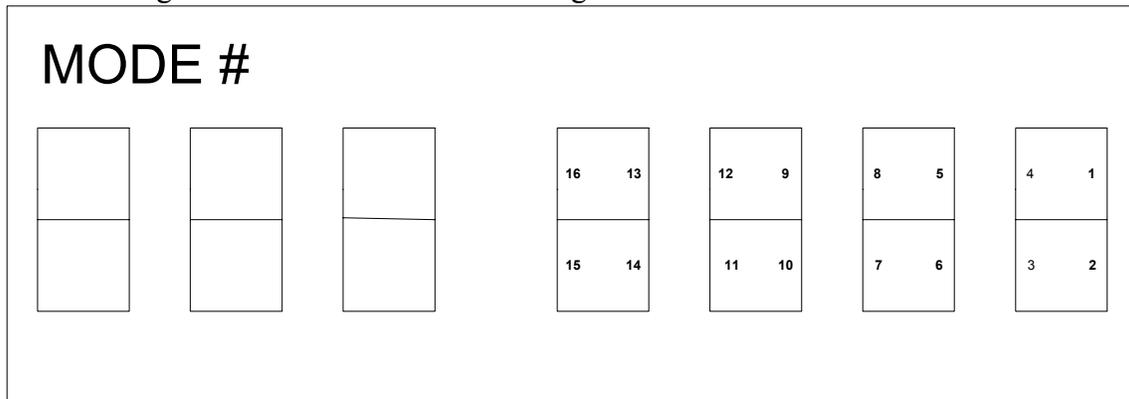
2.1 **OVERVIEW:** The Din score is easily programmed using the four buttons marked MODE, RESET, UP, DN (DOWN). To enter the program mode press the MODE button. The mode number will be shown on the left three digits of the display. The value for each mode is shown on the right five digits. Each press of the button will advance the programming to the next mode. On modes 004 through 039, the UP and DN buttons are used to increment or decrement the setting. The UP & DN buttons may be pressed intermittently to increment or decrement one at a time, or they may be held and will change slowly at first, then very quickly. When the numbers are changing quickly, remove your finger when near the desired number, and then press again to change slowly. Both UP & DN may be pressed simultaneously to clear these settings to zero.

Pressing RESET will halt programming at any step and save whatever changes have been made.

2.2 **MODE 191; AVERAGE POINTS PER COIN:** This is the first mode to appear after MODE is pressed. The Average Points per Coin is calculated by the controller and is used to determine the amount of average score earned from each coin over time. The number may be reset to zero by pressing the UP & DN buttons simultaneously. The Average Points per Coin is determined by the total number of points scored, divided by the number of coins entered into the machine. Press the MODE button to advance to the next mode, or press RESET to return to the game.

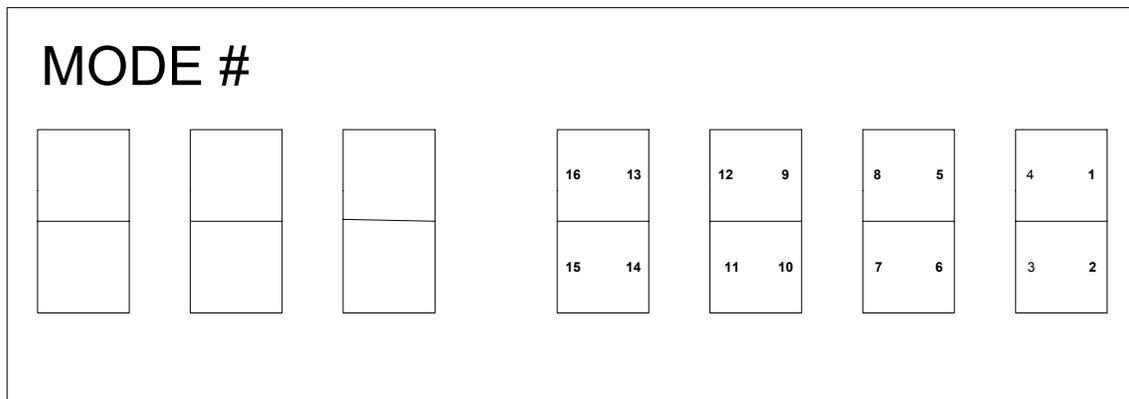
# DINOSCORE TECHNICAL RESOURCE MANUAL

2.3 **MODE 192**; TARGET TEST: This mode is used to check the operation of each of the sixteen target groups. The right five digits of the display will be blank if no targets are on. The vertical side bar segments of the right four digits are used to indicate the function of the target. See the following figure to find the display location for each of the sixteen target groups. When a quarter (or other opaque object) interrupts the sensor on the target, the corresponding segment will light. If a segment is lighted when no object is in the sensor, it indicates a problem with the target sensor or its associated wiring. Press MODE or RESET to exit this mode.



Target Test

2.4 **MODE 193**; VEND BUTTON TEST: This test is similar to the target test above. Each of the vend buttons on the keypad and bulk venders may be tested. The associated bar on the display will light while the button is pressed. See chart below. Press MODE or RESET to exit this mode.



Vend Button Test Locations

2.5 **MODE 194**;FREE VEND TEST: When this mode is entered a score of 99,999 will be entered on the right side of the display. Each of the venders may be cycled by pressing its associated button. The indicator light or led associated with the vendor will light and stay lighted until the next vendor is selected or the mode is exited.

## DINOSCORE TECHNICAL RESOURCE MANUAL

The 99,999 score will be decremented by the value programmed for that vend. Press MODE or RESET to exit this mode.

- 2.6 **MODE 001**; COINS FLIPPED COUNTER: This non-resettable counter will accumulate the total of the number of coins exiting the gun. The maximum count is 99,999 after which the counters will rollover to zero and begin again. Press MODE or RESET to exit this mode.
- 2.7 **MODE 002**; VENDS OUT COUNTER: This non-resettable counter indicates the total number of vend cycles (without regard to points) that have occurred, including bulk dispensers. The maximum count is 99,999 after which the counters will rollover to zero and begin again. Press MODE or RESET to exit this mode.
- 2.8 **MODE 003**:
- 2.9 **MODE 004**; ATTRACT ON: The number of seconds that the attract relay is energized. The attract relay may be used to turn on attract devices when the game is in attract mode (dancing zeros on display). Pressing the UP & DN buttons simultaneously may zero the value. Press MODE or RESET to exit this mode.
- 2.10 **MODE 005**; ATTRACT OFF: The number of seconds the attract relay is off, once it has been on.
- 2.11 **MODE 006**; THEME DELAY: The number of seconds the theme operates after a coin leaves the gun. Scoring may take place only during the theme delay period. If no points are present after the theme delay, the game will return to the attract mode. The theme delay relay is energized during the period. Pressing the UP & DN buttons simultaneously may zero the value. Press MODE or RESET to exit this mode.
- 2.12 **MODES 007-022**; VEND VALUES: The number of points required to vend a price for each vender. As each vend mode is selected, the corresponding LED on the vender will light to help identify the prize being programmed. Note: These modes are ignored when a ticket or token dispenser is installed. Pressing the UP & DN buttons simultaneously may zero the value. Press MODE or RESET to exit these modes.
- 2.13 **MODES 023 – 038**; TARGET POINT VALUES: The number of points awarded for each of the sixteen target groups. Mode 023 corresponds to target group 1, Mode 024 corresponds to target group 2, etc. When a ticket or token dispenser is installed, these values determine the number of tickets or tokens dispensed. Pressing the UP & DN buttons simultaneously may zero the value. Press MODE or RESET to exit these modes.
- 2.14 **MODE 039**; CONSOLATION POINTS: The number of points awarded as a consolation prize. A consolation is earned if after a coin-out, no score is earned.

# DINOSCORE TECHNICAL RESOURCE MANUAL

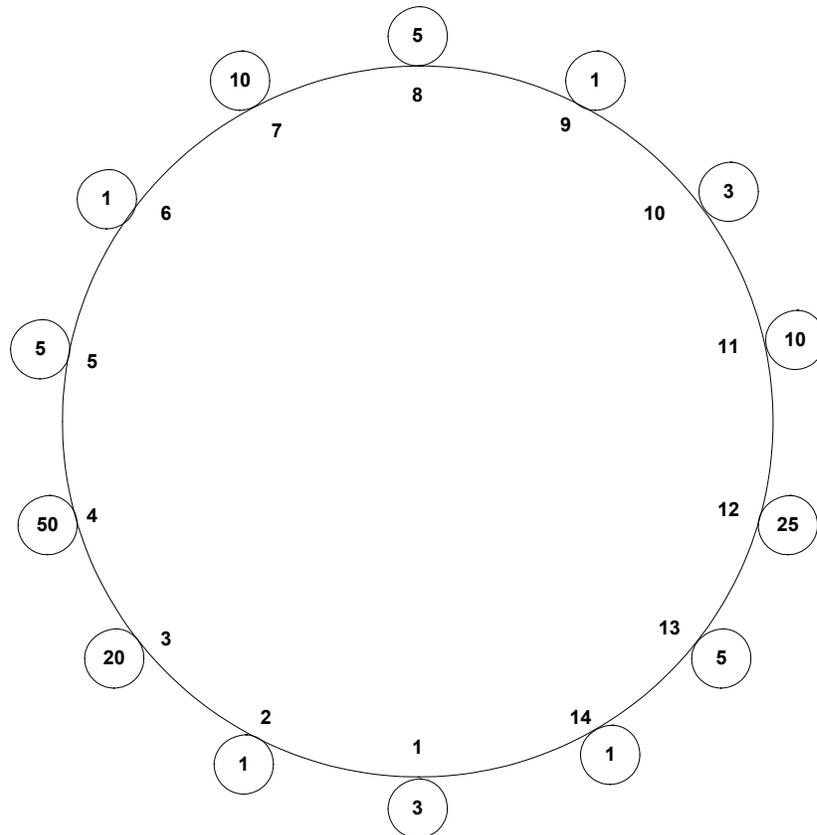
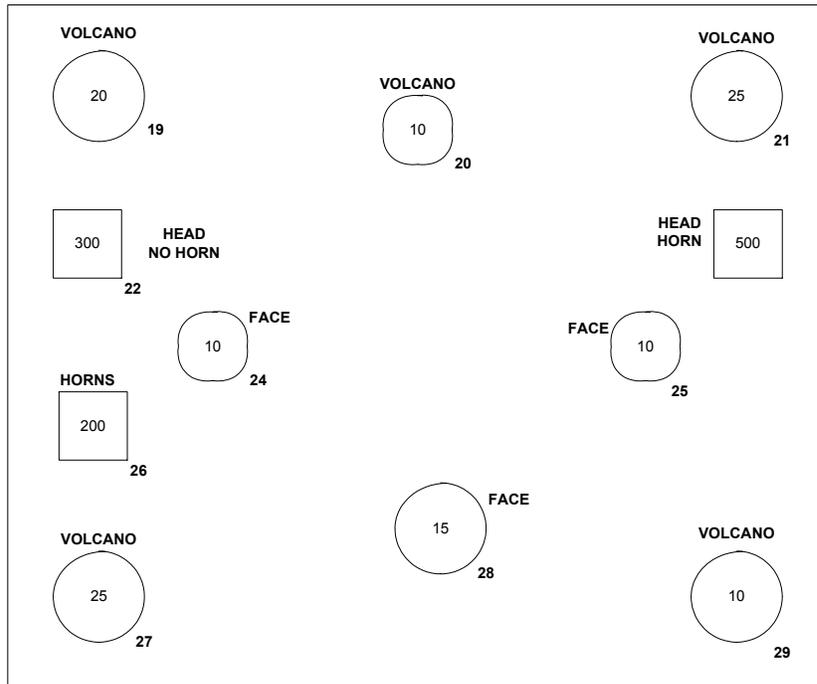
Depending on the setting of the dipswitches, consolation points may be awarded. 1) Always; or only when the score equals zero.2) at the end of the Theme Delay; or when an optional coin verification switch is fitted. See section on dipswitch setting below. If no consolation is desired, set this value to zero.

## 3. DIPSWITCH SETTING

- 3.1 **DIPSWITCH, GENERAL INFORMATION:** The dipswitch (SW1) is located on the main board near the programming buttons. The Off position is toward the edge of the PC board. The dipswitch is only “read” during a power – up cycle. To change the dipswitch settings; turn off the power, change the switches and reapply power.
- 3.2 **DIPSWITCH 1; ATTRACT AUDIO:** When this switch is in the OFF position, the theme music and other sounds will be played during the attract on time.
- 3.3 **DIPSWITCH 2; NOT USED.**
- 3.4 **DIPSWITCH 3; NOT USED.**
- 3.5 **DIPSWITCH 4;** Speed of Ticket/tokens dispensed. Off = fast
- 3.6 **DIPSWITCH 5; CONSOLATION PRIZE DECISION:** If dipswitch 5 is in the OFF position, consolation points will be awarded whenever a coin is flipped, but no targets are hit, regardless of score displayed. When the switch is in the ON position, consolation points are added only when no targets are hit and the score is zero. There must be points programmed into MODE 39 and either dipswitch 6 or 7 OFF, for consolation to be awarded.
- 3.7 **DIPSWITCH 6; COIN VERIFY SWITCH:** If the optional coin verifies switch has been installed to the coin box, moves this switch to the OFF position. When this switch is OFF. The consolation points (if any) will be added immediately.
- 3.8 **DIPSWITCH 7; CONSOLATION ON TIME-OUT:** Consolation points will be added at the end of the Theme Time if this switch is in off position. If dipswitch 6 were OFF, this switch would normally be turned ON. If dipswitch 6 and 7 are ON no consolation will be awarded.
- 3.9 **DIPSWITCH 8; TICKET / TOKEN DISPENSER:** When in the OFF position this switch enables the dispenser. One ticket or token will be dispensed for each point shown on the display.

# DINOSCORE TECHNICAL RESOURCE MANUAL

## DINOSCORE THEME CONFIGURATION



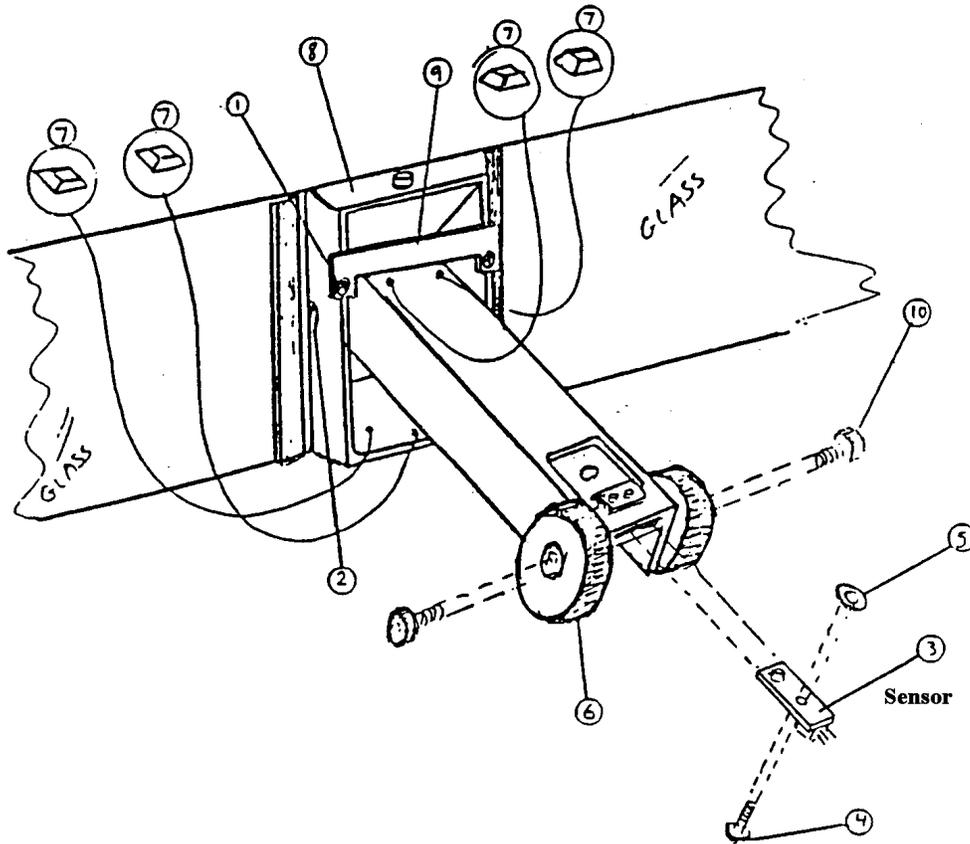
# DINOSCORE TECHNICAL RESOURCE MANUAL

## THEME CONFIGURATION CHART

MODE NUMBER	TARGET VALUE	TARGETS	GROUP NUMBER
23	1	6	1
24	1	14	2
25	1	2,9	3
26	3	1,10	4
27	5	5,8,13	5
28	10	7,11,20	6
29	10	24,25,29	7
30	15	28	8
31	20	3,19	9
32	25	12,21	10
33	25	27	11
34	50	4	12
35			13
36	200	26	14
37	300	22	15
38	500	23	16
39	1	CONSOLATION POINT	
40	1	Number of tickets or tokens dispensed	

# DINOSCORE TECHNICAL RESOURCE MANUAL

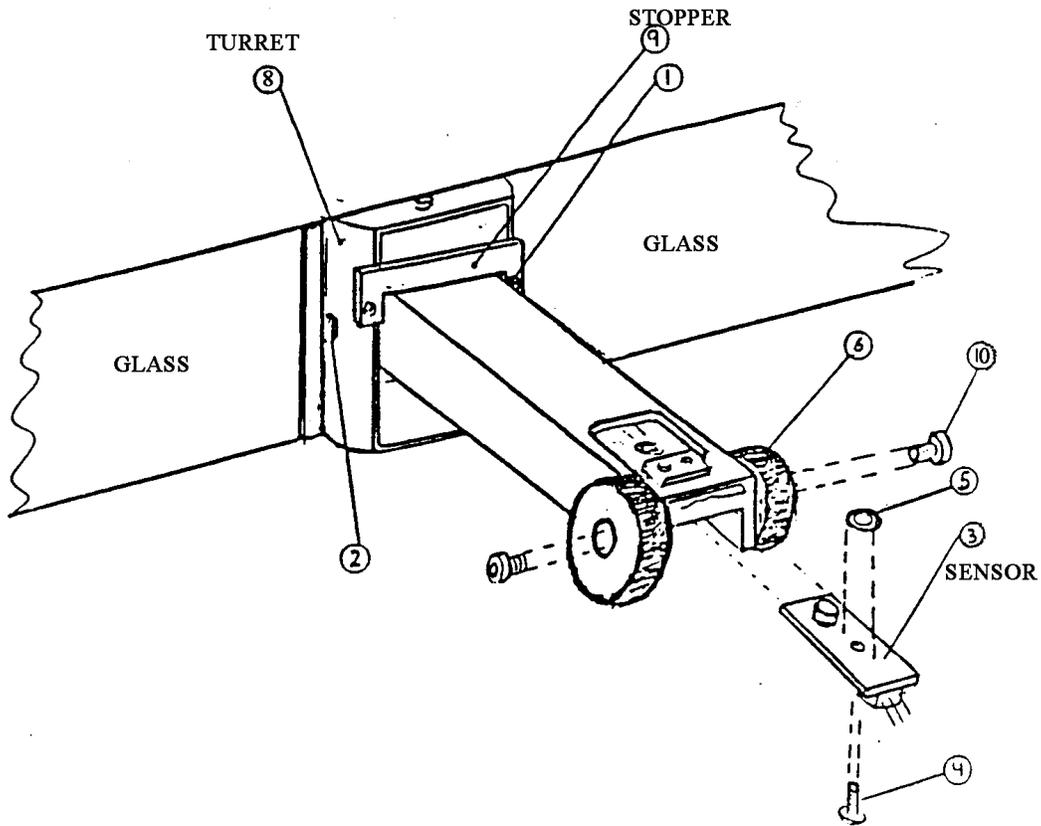
## TO INSTALL THE GUN



- A. Install the sensor (3) on front of gun.
- B. Slide in gun, screw in the shoulder bolt on side of turret.
- C. Doing this make sure gun moves up/down with case.
- D. Screw in two wheels (6).
- E. Screw in Phillips screw: holding up the gun harness.

# DINOSCORE TECHNICAL RESOURCE MANUAL

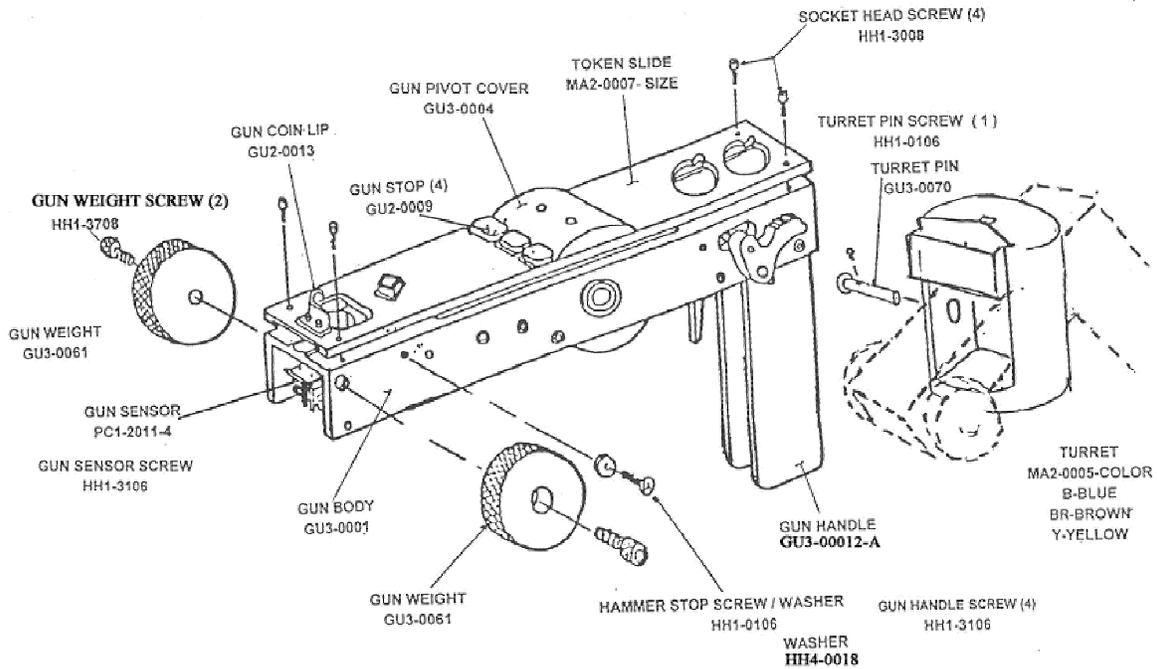
## TO UNDO THE GUN



- A. Undo the Philips screw holding the harness to gun body.
- B. Undo the set-screw (2) on side of turret.
- C. Undo wheels (6).
- D. Gun assembly should slide out now.
- E. Take out the GUN SENSOR (3) by undoing the Philips screw (4) underneath.  
Do not lose the plastic washer on top (5).
- F. Peel off any sticker on gun and save them for the new gun.

# DINOSCORE TECHNICAL RESOURCE MANUAL

## TRIGGER GUN ASSEMBLY



**TRIGGER GUN**

# DINOSCORE TECHNICAL RESOURCE MANUAL

## PARTS LIST FOR GUN

DESCRIPTION PARTS	PART NUMBER	COMMENTS
GUN STOP	GU2-0009	
GUN BACK END	GU2-0010	
GUN TRIGGER ROD HOLDER	GU2-0011	
GUN TRIGGER LINKAGE HOLDER	GU2-0012	
GUN COIN LIP	GU2-0013	
GUN TILT BACK STOP	GU2-0014	
GUN TRIGGER RETAINER	GU2-0015	
GUN INSERTION SHIM	GU2-0016	
GUN INSERTION SHIM THIN	GU2-0016-2	
GUN COVER PLATE	GU2-0017	
GUN TURRET PLATE	GU2-0018	
TURRET PIVOT SCREW	GU2-0023	
PLUNGER BRACKET	GU2-0024	
GUN RE-INFORCEMENT TURRET	GU2-0025	
GUN BODY	GU3-0001	
.867 X .079 TOKEN	GU3-0002-1K	
HUNGARIAN 20 F	GU3-0002-F	
TAIWAN 10 NT	GU3-0002-G	
900 X .05 TOKEN	GU3-0002-H	
GERMAN MARK	GU3-0002-N	
ARGENTINA	GU3-0002-L	
(1.125)	GU3-0002-R	
1.062 X .068 TOKEN	GU3-0002-S	
GUN BOTTOM COVER	GU3-0003	
GUN PIVOT COVER	GU3-0004	
GUN HAMMER W/2 PIN	GU3-0005	
GUN HAMMER WITH PIN	GU3-0006	
GUN TRIGGER	GU3-0007	
GUN HAMMER BEARING	GU3-0008	
GUN HANDLE	GU3-0012-A	
GUN COCKING SHAFT	GU3-0013	
GUN COCKING PIN	GU3-0014	
GUN LEVER LEFT	GU3-0016	
GUN LEVER RIGHT	GU3-0017	
GUN TRIGGER WIRE	GU3-0018	
GUN COCKING WIRE	GU3-0019	
GUN PIVOT SCREW	GU3-0023	
GUN COCKING LEVER SPRING	GU3-0026	
GUN TRIGGER SPRING	GU3-0027	

## DINOSCORE TECHNICAL RESOURCE MANUAL

GUN PAW SPRING	GU3-0028	
GUN HAMMER SPRING	GU3-0029-A	
BRASS SPACER	GU3-0036	
SPACER .193 ID X .250 OD, 19	GU3-0037	
SPACER .125 ID X .360 OD, 470	GU3-0039	
SPACER .128 ID X .187 OD , 43	GU3-0040	
LEVER BEARING	GU3-0050	
PIN, TYPE D, GROOVED, 188X	GU3-0058	
DOWEL PIN	GU3-0060	
GUN WEIGHT	GU3-0061	
COIN CHUTE END BLOCK	GU3-0062	
COIN CHUTE (SINGLE HOLE)	GU3-0064	
PIVOT STOP	GU3-0065	
TURRET MOUNT	GU3-0069	
TURRET PIN / PHILLIPS	GU3-0070	
PLUNGER HAMMER	GU3-0071	
BALL SHOOTER	GU3-0072	
LARGE PLUNGER SPRING	GU3-0073	
SMALL PLUNGER SPRING	GU3-0074	
PLUNGER SLEEVE	GU3-0075	
RUBBER TIP FOR SHOOTER	GU3-0076	
BRONZ BUSHING BEARING	GU3-0077	
TURRET MOUNT SCREW PLUNGER	GU3-0077-1	
5/8" BRASS TURRET BUSHING	GU3-0078	
OLD BRASS TURRET SCREW BUSHING	GU3-0079	
NYLON SPACER	GU5-0039	
HAMMER STOP	GU9-0022	
TURRET PIN SCREW (4-40X3/8)	HH1-0106	
PIVOT COVER SCREW (4-40X1/4)	HH1-1104-A	
BOTTOM PIVOT COVER SCREW PLUNGER (2)	HH1-1104-A	
GUN COIN LIP (2) (2-56X1/2")	HH1-3004	
TOKEN SLIDE SCREWS (4) (2-56X1/2")	HH1-3008	
GUN BOTTOM COVER SCREW (6)	HH1-3104	
ROD HOLDER SCREW (4-40X1/4")	HH1-3104	
GUN HANDLE SCREW (4) (4-40X3/8")	HH1-3106	
GUN SENSOR SCREW	HH1-3106	
BOTTOM PIVOT COVER SCREW TRIGGER (2)	HH1-3106	
GUN LEVER SCREW (2) (5-40X1/2")	HH1-3208	
GUN WEIGHT SCREW (2) (1/4-28X1")	HH1-3708	
PLUNGER BRACKET SCREW (2) (8-32X1/2")	HH1-9408-B	
GUN COCKING SHAFT WASHER (2) T/G	HH4-0001	
PLUNGER BRACKET WASHER (2)	HH4-0013	
WASHER FOR HAMMER STOP	HH4-0018	
E-CLIP 3/8"	HH5-0023	
RUBBER BUMPERS	HH9-0001	

## DINOSCORE TECHNICAL RESOURCE MANUAL

TURRET BLUE	MA2-0005-B	
TURRET BROWN	MA2-0005-BR	
TURRET YELLOW	MA2-0005-Y	
NEW TRIGGER GUN (W/O SLIDE)	MA2-0006-T	
NEW PLUNGER GUN (W/O SLIDE)	MA2-0006-P	
TRIGGER PLUNGER GUN	MA2-0006-RT	
TOKEN SLIDES	MA2-0007-SIZE	
QUARTER	MA2-0007-A	
QUARTER & .984	MA2-0007-AU	
QUARTER & .900	MA2-0007-AC	
.882	MA2-0007-B	
.900	MA2-0007-C	
.984	MA2-0007-D	
1"	MA2-0007-E	
.879 TOKEN	MA2-0007-IE	
100 JAPAN YEN	MA2-0007-J	
ALLADIN'S CASTLE	MA2-0007-K	
NICKEL	MA2-0007-X	
.864X .109 TOKEN	MA2-0007-Y	
GUN HARNESS	MA2-0022-2	
2 GUN AMPLIFIER P.C B.D	PC1-1025-4	
GUN COUNTER PCB	PC1-1050-1	
GUN SENSOR BOARD	PC1-2011-4	
GUN-COCKING LEVER REBUILD KIT	SK1-CLA	
GUN SPRING REBUILD KIT	SK1-GSK	
HAMMER REBUILD KIT	SK1-HA	
PAWL REBUILD KIT	SK1-PA	
PLUNGER REBUILD KIT	SK1-SP	
TRIGGER REBUILD KIT	SK1-TA	
GUN SCREW KIT	SK1-SK	