

TRUCTIONS AND PARTS CATALOG



TO CORPORATION

PREFACE

When setting up this "Laser Grand Prix", never fail to read the Section 2 (Notes for Setting Place) and the Section 3 (Notes for Handling) of this manual.

The setting work includs the connection of the Cabinets, the setting of the Player, the setting of the Disc, and the attaching of the Display Panel.

Again, when setting up this game, carefully read the handling explanation and the stickers attached on the Cabinet.

Specifications:

- 1) Power Source 100 VAC (50/60 Hs)
- 2) Power Consumption 230 W
- 4) Dimensions of the Cabinet Assy
 750 Width x 2,306 Depth x 1,813 Height (mm)
- 5) Weight

Main Cabinet 126 Kg

Seat Cabinet 77.4 Kg

Player 24.3 Kg

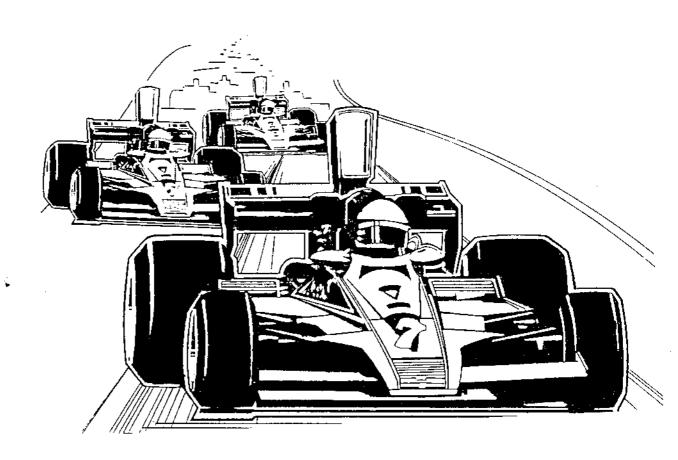
Monitor 22.5 Kg

(The Player and the Monitor are included in the Cabinet.)

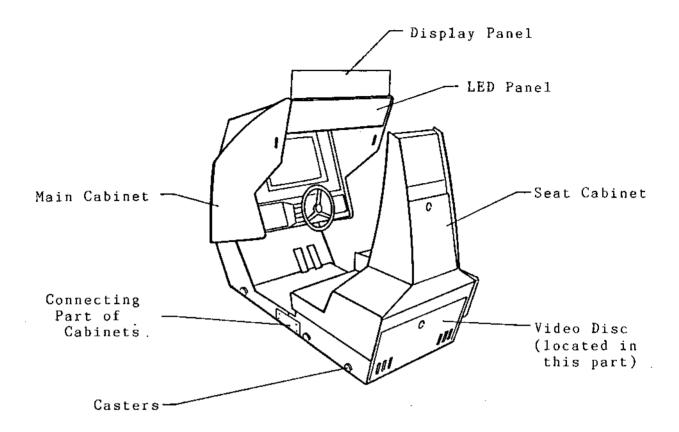
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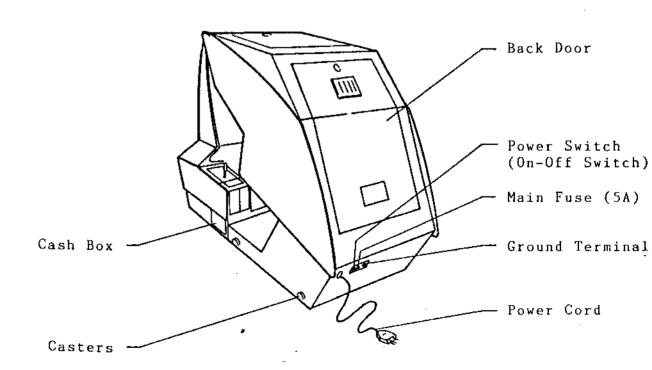
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SERVICE INSTRUCTIONS

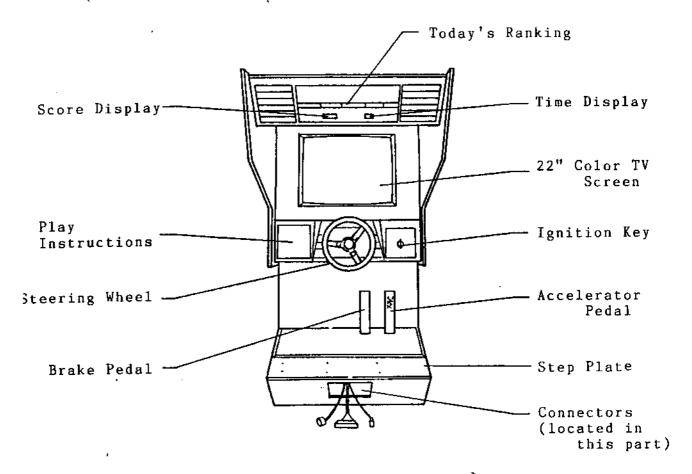


. Name of Part

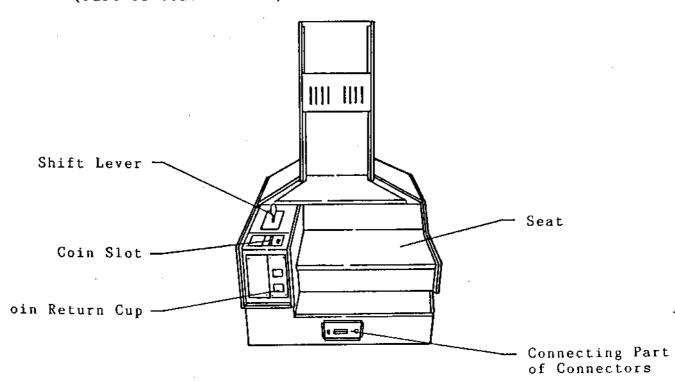




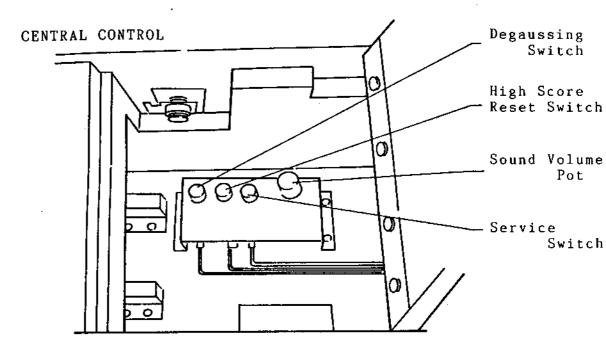
(Part of Main Cabinet)



(Part of Seat Cabinet)



(Switches in the Shift Lever)



* Central Control

o Degaussing Switch

As this game uses the color Video Monitor, when the machine is set up or transported, color distortion may happen. In such a case, push the Degaussing Switch. In case of using this Switch continuously, use it at 10-munute intervals.

- o High Score Reset Switch

 When this Switch is pushed, the today's ranking and high score display are reset to "0".
- o Sound Volume Pot

As a rotary switch is used, the sound volume can be controlled in 4 steps. Adjust it according to the location.

If further adjustments are needed, refer to the section for the adjustment of the PCB's.

o Service Switch

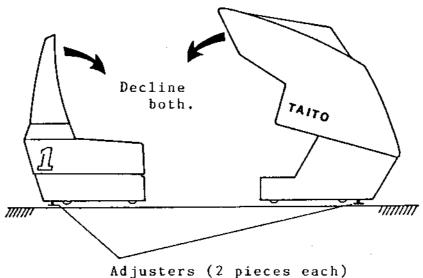
By pushing this Switch, the number of credits can be increased without working the Counter.

Notes for Setting Place .

- o " Laser Grand Prix " is for indoor use. Install the machine indoors only.
- o Install the machine on a flat-surfaced floor and provide suitable space around the machine.
- o Do not install the machine in location without vibrations.
- o Do not install the machine in location with exposure to direct sunlight or excessive heat in order to prevent the unit from rising internal temperature. Also, do not install the machine in humid dusty places.

(The location room temperature should be less than 30 degree C.)

- o Do not install the machine in dangerous places viewed from the angle of disaster prevention (such as emergency exit and fire alarm).
- * When the setting place is decided, adjust the feight of the both Cabinets by declining them and by using each 2 pieces of the adjusters as shown below.
- * The connection between the Main Cabinet and the Seat Cabinet should be done after doing the above adjustment.



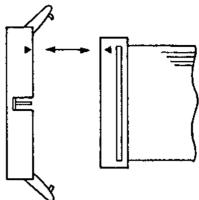
Notes for Handling

- o As this game uses the color Video Monitor and the Video Disc Player, avoid rough handling in transportation.
- o When the Disc is set into the Player, do it in the location.
- o After Setting the Disc, if the machine is moved, screw the Shipping Screws without fail. Otherwise, the Disc may be damaged or the Player may become defective.
- o When the Player itself is moved, never fail to do the shipping for it.
- o The Ground Terminal of the machine should be connected to the ground.
- o The parts of the machine may be loosened during transportation. Therefore, check whether all of the PCB's are correctly mounted and the Connectors are perfectly connected.
- o There are parts with high-voltage in the TV Monitor unit.

 Attention must be paid so as not to touch them. Also, do not touch the white-paint-locked preadjusted parts.
- o Even if the PCB's are evidently defective, do not attempt to service with ordinaly testing equipment, since the internal voltage of the testing equipment may cause damages to the circuitry of the PCB's.
- o Do not disclose the Video Disc Player. There are very dangerous parts in the Player, such as the parts having high-voltages or emitting laser beams.

 Also, do not inspect the inside of the Player, which may cause damages to the parts.
- o If any foreign metal pieces happen to be in the Player, stop operating the Player. Otherwise, they may cause damage to the Player.
- o Never connect or disconnect any of the Connectors for the PCB's while the power is on.

o When connecting the Flat Cables, pay attention to the connecting direction.



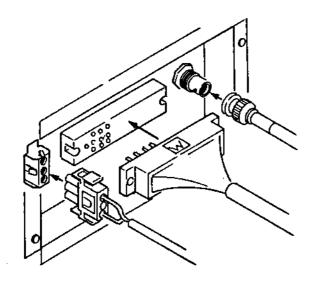
- * After putting the both marks together, connect the Connectors.
- o Only use the specified fuse. If the specified fuse is cut off, turn off the power and stop operating the game.
- o When checking the output voltages, refer to the Wiring Diagram and the adjustment of the Switching Regulator in this manual. If the line voltages are set higher than the specified voltages, it may cause damages to the IC's.
- o If the voltages drop during playing, the screen may stop displaying. In such a case, turn the power off and on again.
- o Do the cleaning of the Disc and the Filter twice a month.

 Attach them so that no gap exists.

. Daily Safety

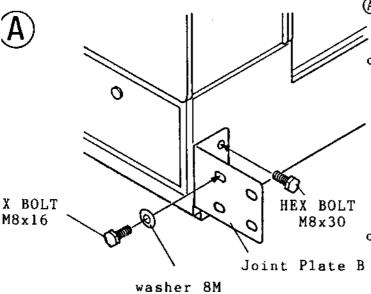
o Although this game is designed based on our safety standard, any abnormal things may happen in a long period of time. Therefore, it is necessary to take measures to insure it is daily safety.

. Connection of the Main Cabinet and the Seat Cabinet (Do this connection after adjusting the adjusters.)



- o Pull out the three connectors from the Main Cabinet.
- o Completly connect the three Connectors into the Seat Cabinet.
- * There are two kinds of connecting methods.

 Connect the Connectors according to the seat position.



ASHER

8M

HEX BOLT

M8x16

Joint Plate A

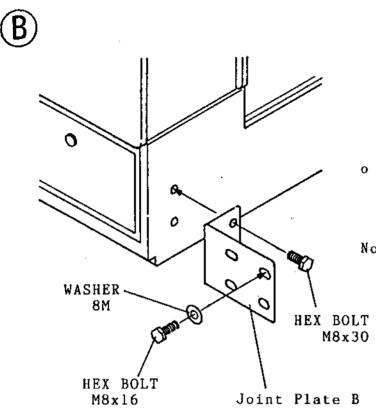
(A): Seat Position
(for 160-cm height person)

- o Detach the Joint Plates
 (A and B) which are temporarily attached to the both sides of the Main Cabinet, and connect the both Cabinets by using those Joint Plates and the Bolts (M8x16 and M8x30).
- o First, attach the two kinds of the Joint Plates to the Seat Cabinet by using the Bolts.
- o The Joint Plate (B) is to be attached to the side of the Cash Box of Seat Cabinet.

Note: The oval hole side of the
Joint Plate (A) is to be
placed on the
Main Cabinet side.

o Use the Washers for screwing the Bolts on the Main Cabinet side.

(B): Seat Position (for 170-cm height person)



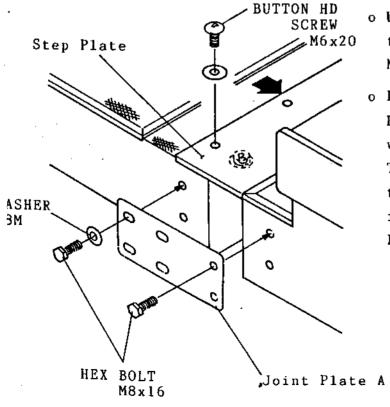
- o Detach the Joint Plates (A and B) which are temporarily attached to the both sides of the Main Cabinet, and connect the both Cabinets by using those Joint Plates and the Bolts.
- o First, attach the two kinds of the Joint Plats to the Seat Cabinet.

Note: The oval holes of the

Joint Plates (A) is to be

placed on the

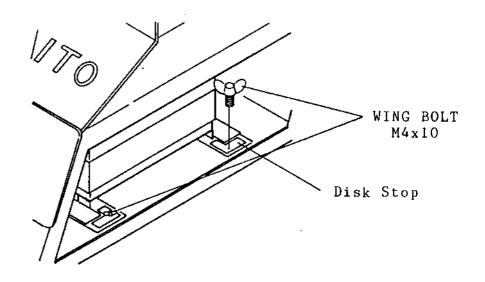
T Main Cabinet side.



- o Use the Washers for screwing the Bolts on the Main Cabinet side.
- o Detach 4 pieces of the
 Button Hd Screw (M6x20)
 which fix the Step Plate.
 Then, slide the Step Plate
 to the Seat side, and fix
 it again by using the same
 Bolts.

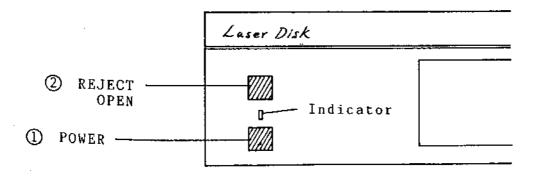
How to set the Player and the Disc

o The Player and the Disc are attached to the inside of the Back Door of the Seat Cabinet. Open the Back Dooe, and remove 2 pieces of the Wing Bolts (M4x10) which fix the Player, then pull out the Player and the Disc from the inside of the Cabinet.



- 6-1. Opening and Closing of the Dust Cover
 - o Plug the Power Plug of the Player into the AC-Socket located of the Seat Cabinet, and turn the Power Switcg on.
 - o Push the Power Switch ① ("POWER") of the Player. (The Indicator located above the Switch is lit.)
 - o After pushing the Reject Open Button ② (REJECT OPEN"), the Dust Cover can be open by your hand.

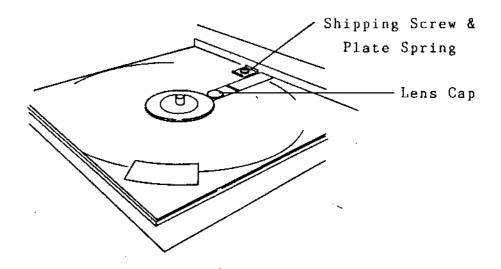
Caution: Do not use any other plugs than the Power Plug of the Player.



- ,-2. Shipping for the Player and the Lens Cap
- o In order to protect the inner parts during transportation, the shipping protection has been doen on the Player itself and the Cap has been put on the Lens.

 Before setting the Disc, never fail to remove the Sipping Screw, the Plate Spring and the Cap.
- o Keep the romoved Shipping Screw, Plate Spring and Cap for retransportation.

Note: In case that the Player is retransported, use the same Shipping Screw, Plate Spring and Lens Cap without fail.



6-3. How to handle the Disc

o When handling the Disc, handle it as the same m nner as that for stereo record discs. When holding the Disc, do not touch the signal-recorded surface. Hold it as shwn below.

In case of holding the Disc by both hands:

In case of holding the Disc by single hand:

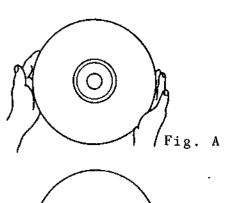




Fig. B

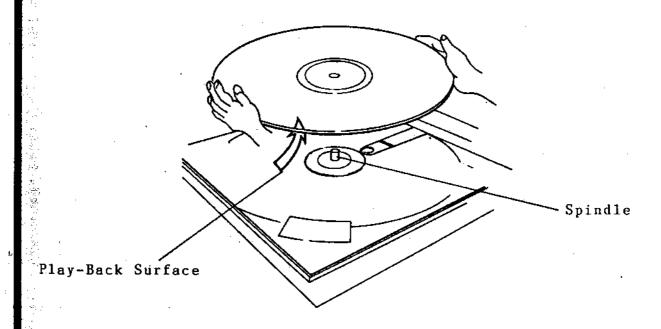
4. Attachment and Detachment of the Disc

When attaching the Disc, set it on the Spindle with facing the play-back surface (the recorded surface) up.

Note: The Shipping Screw, the Plate Spring and the Lens Cap should be removed.

o After setting the Disc, close the Dust Cover, turn the power of the Cabinet off, and refer to the section for the connection of the Player Harness.

(The Power Switch "POWER" of the Player is continuously "ON" in this procedure.)



Note for detaching the Disc after setting

When the Disc is detached at the time of game-over for cleaning, turn the power of the Cabinet off without fail. Also, after removing the Harness connected to the Player, then pull out the Player from the Cabinet, and the Dust Cover.

-5. How to connect the Player Harnesses

Note: When connecting the Harnesses oxtime 0 , oxtime 2 and oxtime 3 , turn the power of the Cabinet off without fail.

The connection should be made after setting in the Guide.

For the above, the setting of the Player is completed. By closing the Back Door and turning the power of the Cabinet on, the game can be played.

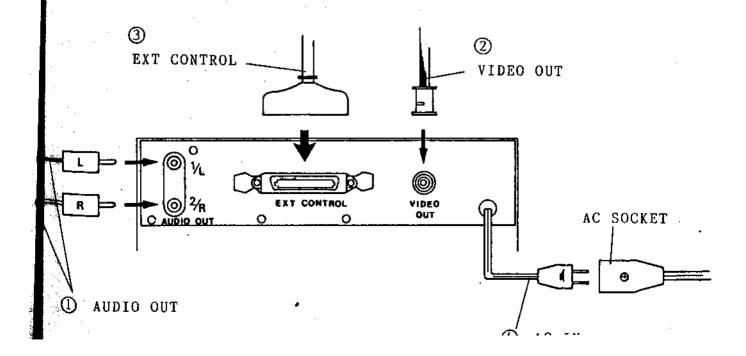
When detaching the Disc, turn the power of the cabinet off and unplug the harnesses 1, 2 and 3.

1 : AUDIO OUT (Output Terminal of Audio Signals)

2 : VIDEO OUT (Output Terminal of Video Signals)

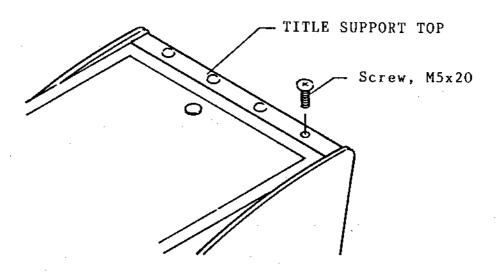
3 : EXT CONTROL (Connector used in case that the function of the Player is computer-controlled.)

4 : AC-IN (Power Input Plug of 100 VAC)

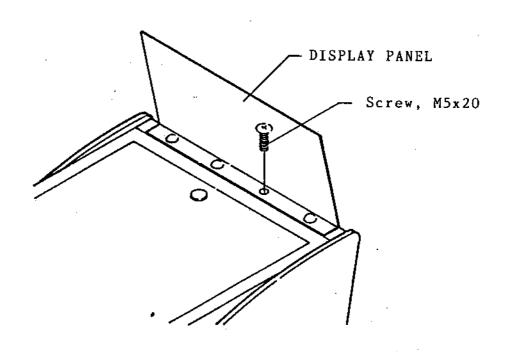


How to attach the Display Panel

Remove 4 pieces of the screws (M5x20) which fix the Title Support Top for the LED Panel of the Main Cabinet.



Put the Display Panel on the Title Support Top, and fix it by using the same screws (4 pieces of M5x20).



- . Playing Instructions
- * This game is the Grand Prix Race played on the Fuji Speed Way.
- o One player game
- o l coin l play (Adjustable)
- o Insert coin, and turn the Ignition Key.
- o Bring the engine to the maximum torque while in the "NEUTRAL".
- o When the sign says "GO", shift into the "LOW" gear and start racing.

(If you shift into the "LOW" gear before starting, a penalty is imposed on you.)

Drag Race: 400-meter Straight Course

o Your starting position for the GP-Race is determined on your lap time.

GP-Race: If you complete driving within the set time you can challenge the next round. If you clear the fourth round, you can challengs the Spark Race.

(The set time is adjustable.)

Spark Race: If you complete 2 rounds of this race within the set time, you can go to the glory Fantastic Race.

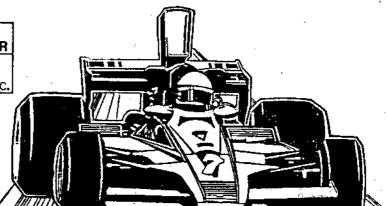
(The set time is adjustable.)

o The game ends when the time reaches "00".

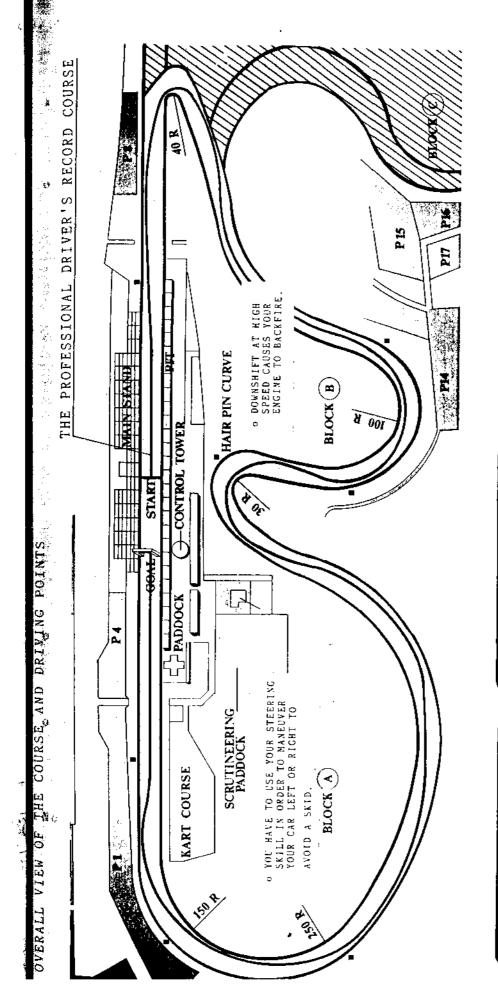
GP - RACE

1_R 2_R 3_R 4_R 8 60 58 58 SEC. SEC. SEC. SEC.

R: Round)







MASTER THE PROFESSIONAL DRIVER'S COURSE TO OBTAIN HIGH SCORE *



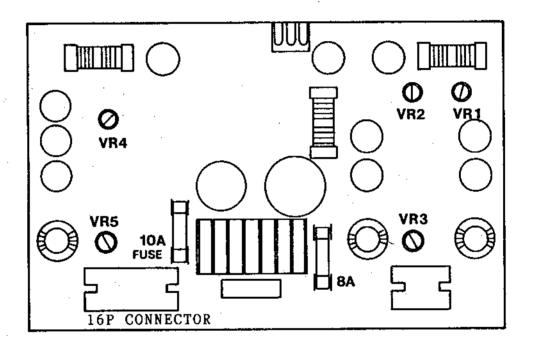


Adjustment of the Switching Regulator

The Switching Regulator is located in the Main Cabinet.)

To set the voltages higher than the standard values will cause damage to the IC's. (Refer to the section for the sensing function.)

When checking the output voltages, refer to the Wiring Diagram in this manual. Adjust the Pots by using a small (-)-type driver.



vR3 The Pot for adjusting the 12 VDC line.

(adjustable ±5%)

Set at 12V.

v VR5 The Pot for adjusting the 5 VDC line.

(adjustable ±5%)

Set at 5V.

Note: The 13 VDC is fixed, and there is no pot for adjusting this line. Do not adjust VR1, VR2 and VR4.

These Pots are for adjusting the logic circuitry.

Careless adjustment on these Pots may cause damage to the circuitry.

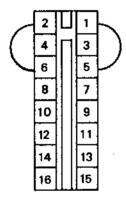
Sensing Function

(This function is to be used when the output voltages are checked in no load condition.)

The Switching Regulator used in this game has the sensing function.

This function is the function to keep the +5V constant even if the current on the load side (the Main PCB side) of the +5V fluctuates. For this, the sensing function will not work in no load condition (i.e. the Main PCB is removed), and the all circuitry will stop outputting voltages. Therefore, when the output voltages are checked in no load condition, the following work is needed.

< Switching 16-P Nylon Connector>



Jumper Wires:

Pin 1 —— Pin 5

Pin 2 - Pin 6

(Jumper on the back side of the connector on the solder side.)

ote:

After checking the output voltages, remove the jumper wires without fail. Leaing the jumper wires there will cause malfunction of the circuitry because of the over-voltage prevention circuitry.

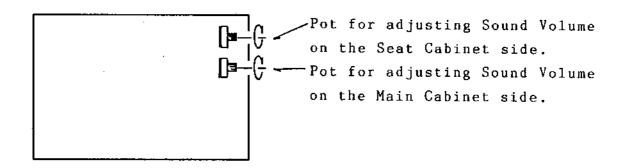
Do not turn the Power Switch on and off instantaneously.

Doing so will cause repeated rush current occured and will
cause damage to the switching transistors.

Adjustment of Game PCB

(The PCBs are located in the Main Cabinet.)

o Adjustment of Sounds



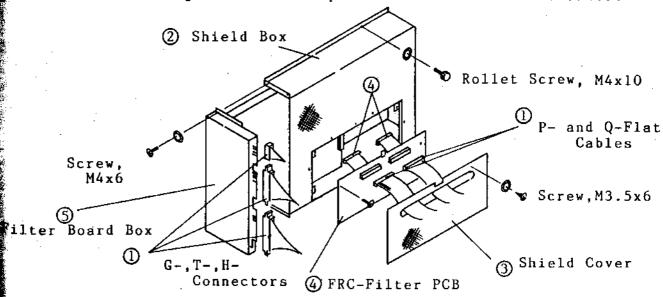
o Change-over of DIP Switch Settings

The DIP Switches are mounted on the PCBs located in the Shield Case. When changing-over the settings of the DIP Switches, turn the Power Switch off, and take out the Shield Case from the Cabinet.

Procedure:

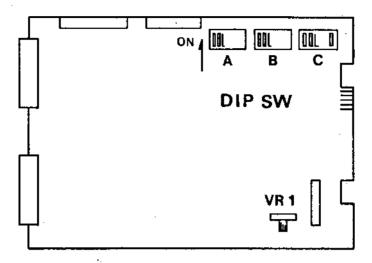
- ① Unplug the G-,T-, and H-Connectors and the P- and Q-Flat Cables.
- 2 Take out the Shield Box frome the Cabinet.
- 3 Open the Shield Cover.
- Detach the FRC-Filter PCB, and Unplug the P- and Q-Flat Cables connected to the Game PCB.
- (5) After removing the Filter Board Box, the Game PCB can be detached from the Shield Case.

When attaching do the above procedure in the reverse order.



The DIP Switches are mounted on the PCBs located in the Shield Case.

(The settings of the DIP Switch can be done only after removing the Shield Case.)



Note: Do not turn the Pot, VR1.

This Pot is for adjusting the synchronization, and preset at the factory. Caseless turning this Pot will cause defect to video images.

o Settings of DIP Switch A: Change-over of Time Settings

Setting		Pos:	<u>ition</u>	1	2	3	4	5	6	7	8
	*	68	Sec.	ON	ON						
GP-Race		66	Sec.	OFF	ON						
(1-4-1)		64	Sec.	ON	OFF						
(1st Round)		62	Sec.	OFF	OFF					•	
		62	Sec.			ON	ON				
GP-Race	*	60	Sec.]		OFF	ON				
(2nd Round)		58	Sec.			ON	OFF				
(Zna kouna)		56	Sec.			OFF	OFF				
		60	Sec.					ON	ON		
GP-Race	*	58	Sec.					OFF	ON		
(3rd and 4th		56	Sec.					ON	OFF		
Rounds)		54	Sec.					OFF	OFF		
	*	44	Sec.							ON	ON
Spark Race		42	Sec.							OFF	ON
		40	Sec.							ON	OFF
		38	Sec.	<u> </u>				<u>.</u>		OFF	OFF

(*): Factory Settings

Position	1	Way (Left)		2 Ways (Right)			
Setting	1	2	3	4	5	6	7	8
*1 coin -1 play	ON	ON	ON	21	ON	ON OFF	ON .	ON
l coin -2 plays	OFF				OFF			
l coin -3 plays	ON				ON			
l coin -4 plays	OFF	OFF			OFF			
1 coin -5 plays	ON	011		ON	ON	ON OFF	OFF	
1 coin -6 plays	OFF	ON	OFF		OFF			
1 coin -7 plays	ON	OFF			ON			
l coin -8 plays	OFF	OFF			OFF			
2 coins-1 play	ON	611	ON	OFF	ON	ON	ON	OFF
3 coins-1 play	OFF	QN			OFF			
4 coins-1 play	ON	0.00			ON	OFF		
5 coins-1 play	OFF	OFF			OFF			
6 coins-1 play	ON	ON	OFF		ON	ON OFF	OFF	OFF
7 coins-1 play	OFF				OFF			
8 coins-1 play	ON				ON		UFF	
9 coins-1 play	OFF				OFF			

(*): Factory Setting

In case of the 2 ways, the coin inputs of the both coin slots will increase credits independently.

(For example: When setting "2 coins - 1 play", if each one coin is dropped into the both coin slots, no credit is increased.)

Setting	Position	1	4	5	6	8
Free Play	Free Play	ON		<u> </u>	<u> </u>	<u> </u>
	* Normal Game	OFF				
Coinage Display	Without	- "	ON			
	* With		OFF			
Year Display	Without	'		ON		
	* With			OFF		
No Hit Date of	No Hit			<u> </u>	ON]
No Hit Detection	* Normal Game				OFF	1
Coin Slot	2 Ways			l	l <u>-</u>	ON
	* 1 Way					OFF

(*): Factory Settings

Note: The positions 2, 3 and 7 are not used in this game, and these positions should be set at "OFF".

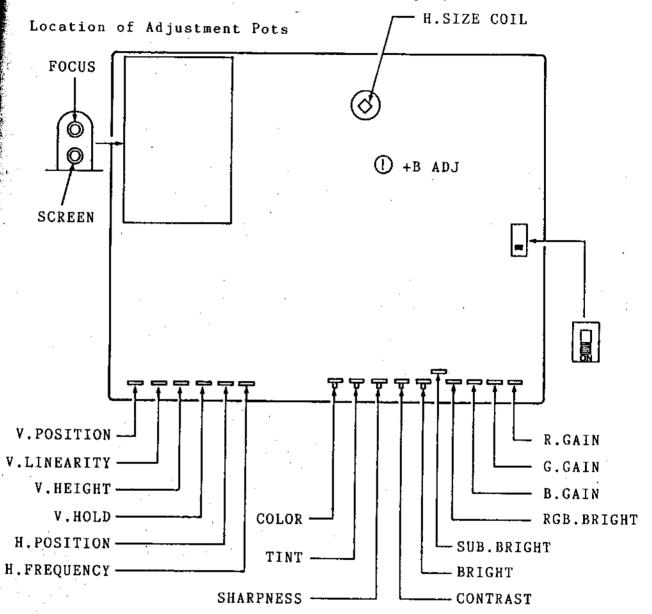
§ Free Play

The game can be played without inserting coins.

§ No Hit

If the player's car touches the shoulder of the course, the speed of the car is decreased, but if the player's car crashes rival cars, no explosion happens and can proceed to the final game. The time has no relation to this mode.

o This game has the circuitry, in which the NTSC Color images and the RGB input signals are composed by the control signals. This Monitor is a spacial NTSC color display Monitor.



o The adjustments have been done at the factory for the best performance, but if necessary, adjust the above Pots by referring the explanation for each adjustment.

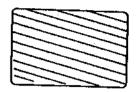
Note: Careless adjustment will cause malfunction to the Monitor.

Do not touch the white-paint-locked Pots. Also, as the high-voltages exist in the TV Monitor unit, attention must be paid when handling it.

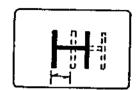
Explanation for Adjustments

The location of the Adjustment Pots is shown on the previous page.

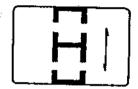
o H.FREQUENCY (Horizontal Frequency Adjustment)
Adjust this Pot, if the horizontal stripes appear
on the screen or the screen rolls from left to
right.



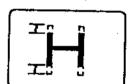
o H.POSITION (Horizontal Position Adjustment)
Adjust this Pot to move the screen left or right
for desired positioning.



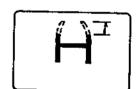
o V.HOLD (Vertical Hold Adjustment)
Adjust this Pot if the screen rolls up or down.



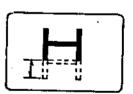
o V.HEIGHT (Vertical Amplitude Adjustment)
Adjust this Pot to change the vertical screen size.



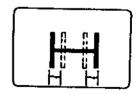
o V.LINEARITY (Vertical Linearity Adjustment)
Adjust this Pot, if the upper or the lower part
of the screen is shrunken.



o V.POSITION (Vertical Position Adjustment)
Adjust this Pot to move the screen up or down
for desired positioning.



o H.SIZE COLIL (Holizontal Amplitude Adjustment)
Adjust this pot to change the horizontal screen size.



o RGB-GAIN (Logic Screen Image Adjustment)

R.GAIN ... for changing red color

G.GAIN ... for changing green color

B.GAIN ... for changing blue color

- o CONTRAST (Player Screen Image Adjustment)
 Adjust this Pot to change the contrast of the screen image.
- O SHARPNES (Player Screen Image Adjustment)
 Adjust this Pot to control the sharpness of the screen image.
- o COLOR (Player Screen Image Adjustment)

 Adjust this Pot to control the darkness of the screen image color.
- o TINT (Player Screen Image Adjustment)

 Adjust this Pot to control the hue of the screen image color.
- * In some cases of setting conditions, the screen color may be distorted. In such a case, use the Degaussing Switch located in the shift lever or a degaussing device.
- o +B ADJ The +B line voltage is set at 106 VDC ±1 VDC. Normally, Do not adjust this +B line voltage.
- o Impedance Switch
 The Impedance Switch is set at 75 Ohm.
 Normally, this Switch is set at "ON" position.

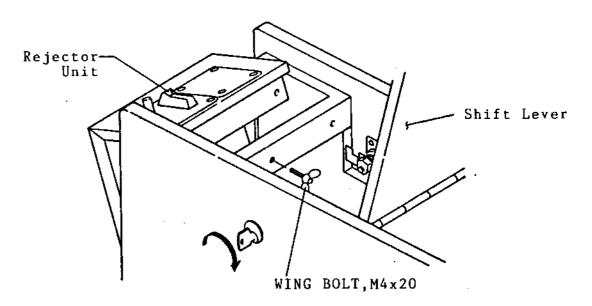
12. Daily Maintenance

12-1. Opening of the Shift Lever Unit and the Rejector Unit

By releasing the both Service Locks, the Shift Lever Unit

can be opened. The Rejector Unit can be released by

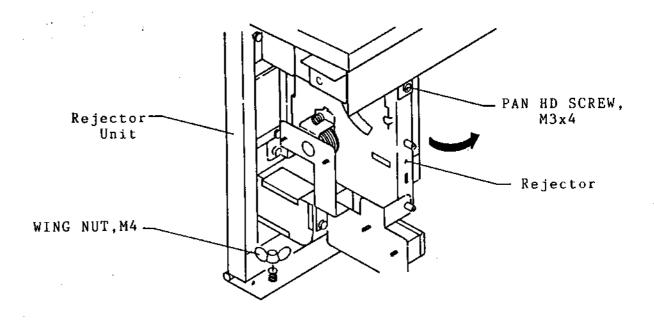
removing 2 pieces of the Wing Bolts (M4x20).



12-2. Detachment of the Rejector Unit and the Rejector

By removing 3 pieces of the Wing Nuts (M4), the Rejector Unit can be detached.

The Rejector can be detached by removing the Pan Head Screw (M3x4) and pulling it to the direction shown with the arrow in the following sketch.



12-3. Exchange and Adjustment of Coin Switch

* In case that the Coin Switch does not work (because of the malfunction of the Micro Switch and the Actuator), refer to the following procedure.

(1) Exchange of the Coin Switch

Remove the Pan Head Screw (M3x25) which fixes the Micro Switch, and detach the Switch from the Holder. And, attach the Switch with the already-properly-adjust Actuator.

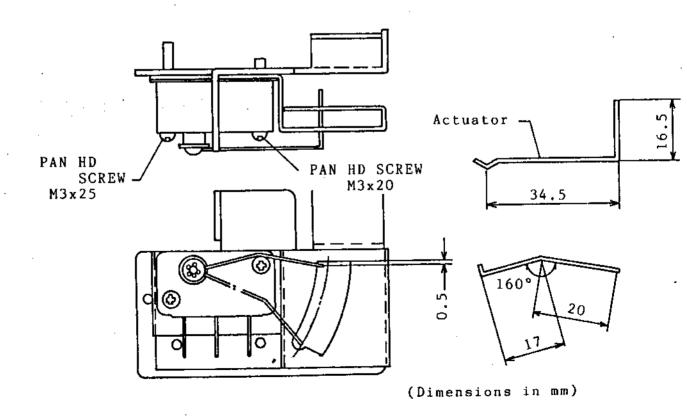
Note: When adjusting the Actuator, refer to the following sketch.

As to the wiring of the Harness, refer to the later page.

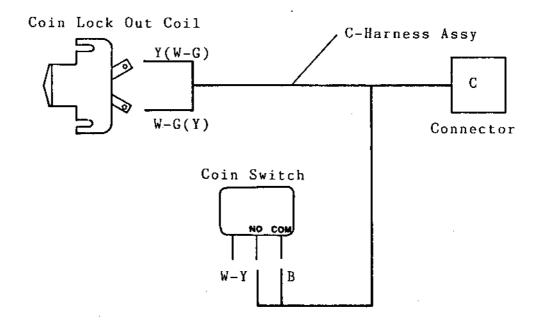
2 Adjustment of the Actuator

Attach the Actuator to the Micro Switch, fold it by referring the dimensions as shown below.

The folding work should be done befor the Switch is attached to the Holder by using the Screw.



Wiring of the Coin Switch and the Coin Lock Out Coil



Where: Y ... Yellow

W ... White

G ... Green

B ... Black

* No color is specified on the Harness to the Coin Lock Out Coil.

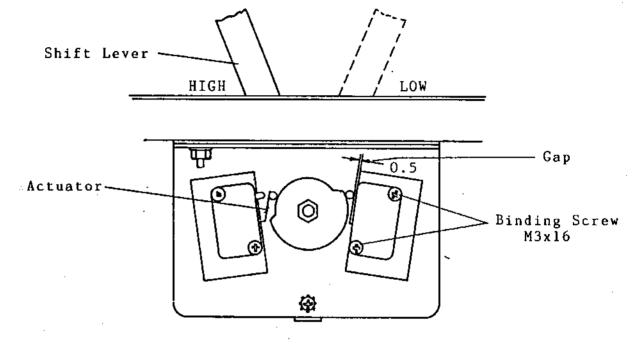
12-4. Exchange and Adjustment of the Shift Lever Switch

1 Exchange

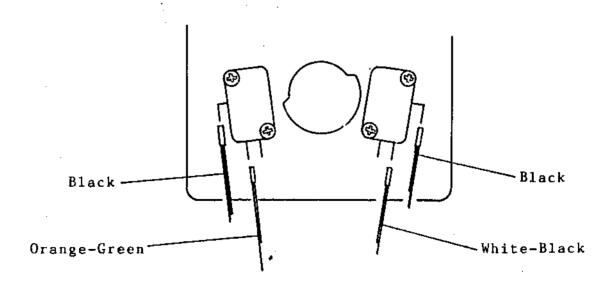
Remove 2 pieces of the Binding Screws (M3x16) which fix the Micro Switch.

2 Adjustment

Adjust the Switch so that it will be surely at the "ON" position when the Shift Lever is shifted, and the gap between the Actuator and the Switch itself will be 0.5mm.

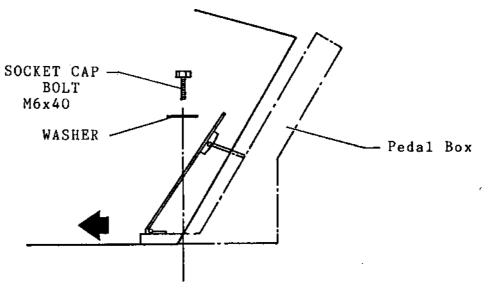


③ Wiring (J-Harness Assy)



12-5. How to detach the Pedal Box

Remove 3 pieces of the Socket Cap Bolts (M6x40) which fix the Box. And, pull the Box toward you and unplug the Connector from the main body, than the Box can be detached. (The Pedal can be slided toward you by moving the position of the Box fixing holes.)



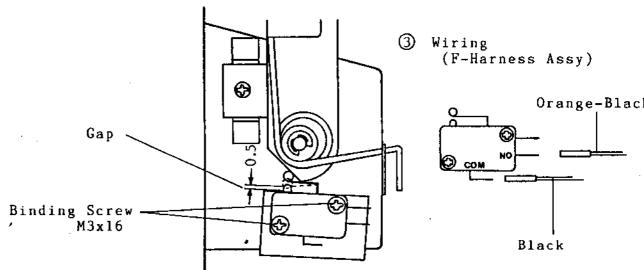
12-6. Exchange and Adjustment of the Brake Pedal Switch

① Exchange

Remove 2 pieces of the Binding Screws (M3x16) for the Micro Switch.

2 Adjustment

Adjust the Switch so that it will be surely at the "ON" position when the Pedal is stepped and the gap between the Actuator and the Switch itself will be 0.5 mm.



12-7. Exchange and Adjustment of the Accelerator Pot

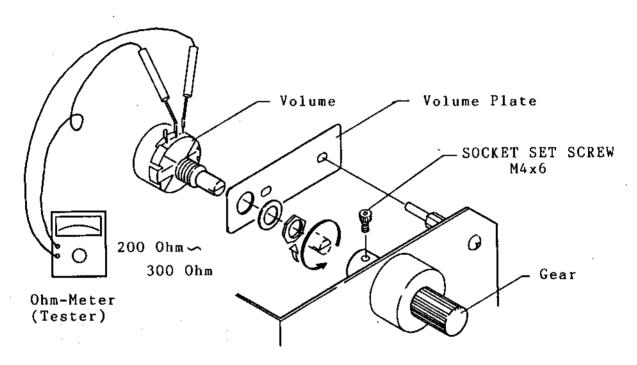
① Exchange

Unscrew 2 pieces of the Socket Set Screws (M4x6) which fix the Pot, and pull out it from the Gear.

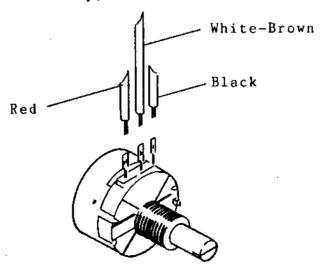
2 Adjustment

As to the new Pot, after attaching the Pot Plate, turn the Shaft of the Pot counterclockwise to its end, and turn back it until the resistance shows $200 \sim 300$ Ohm measured by using an ohm meter (tester).

After completing this adjustment, attach the Pot to the Gear in the condition that the Pedal is not stepped.

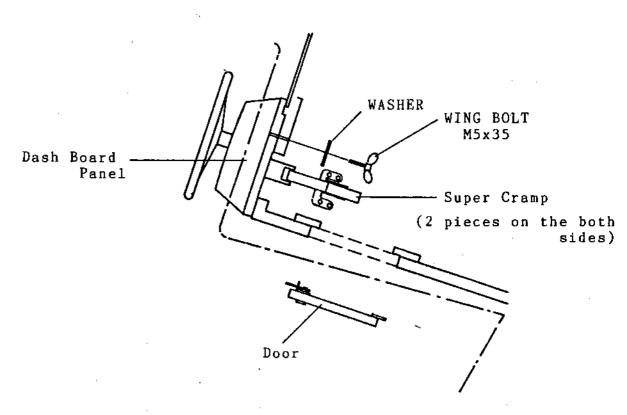


③ Wiring (E-Harness Assy)



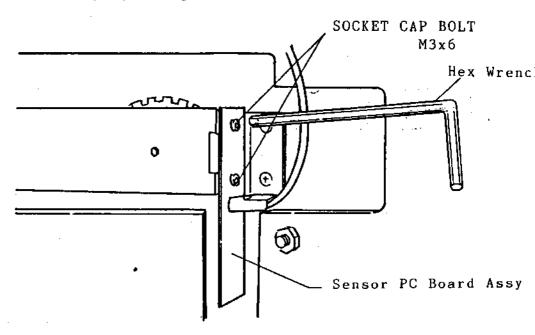
12-8. Opening of the Dash Board Panel

Open the Door located under the Dash Board, and remove the Wing Bolt (M5x35) located in the middle back of the Dash Board. And, by releasing the Super Creamps on the both side, the Panel can be opened.



12-9. Exchange of the Sensor PCB

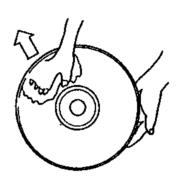
Remove 2 pieces of the Socket Cap Bolts (M3x6) which fix the Sensor PCB Assy by using a hex wrench.



12-10. Cleaning of the Disc and Filter

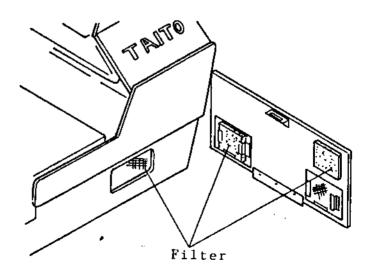
- ① Cleaning of the Disc
 - o Clean the Disc twice a month.
 - o When cleaning, sweep away dust by using a record cleaner or soft cloth.
 Sweep on the Disc from the center to the outer side as shown below.
 - o In case that the Disc is very dirty, wash it.

 After washing, sweep away the water by using soft cloth.

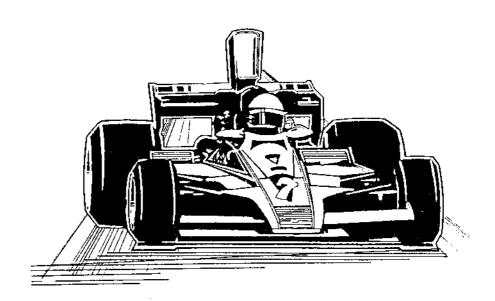


- ② Cleaning of the Filter
 - o Wash the Filter twice a month at the same time of cleaning the Disc.

After washing the Filter, dry it well. When attaching, no gap should exist.



PARTS CATALOG



LASER GRAND PRIX

SS
<u> </u>

Item	Part No		Description
	Laser (Grandprix Main	x Main Cabinet Ass'y (W90 00201A)
-	E50 00	00111A	Service Lock No.8300 Single
7	E30 00(00008A	Lock Plate Long-Size
m	E30 000	00066A	Lock Guard (B)
∢7	ES0 600	60028A	Super Cramp C-137
٧n	E30 013	01707A	Title Support Top
9	095 000	V06000	
7	C90 001	00183A	Today's Best Card
æ	F90 004	00603A	Title Sponge
٥	E30 017	01708A	Title Support Bottom
10	E30 017	01706A	Front Support
11	695 000	00091A	Front Panel '
12	00 519	00042A	Front Sticker
13	F90 00:	A76200	Color Plate 22"
14	F90 003	V96500	Video Mask 22"
15	6.95 001	00105A	Display Panel
16	E30 017	01703A	Video Base
17	F90 004	V10900	Mat
18	E30 016	01699A	Trim (L) L-210mm
19	E30 01	01700A	Trin (R) L=210mm
20	E30 016	1698A	Trim L=720mm
21	E30 01	01704A	Joint Plate (A)
22	E30 013	01705A	Joint Plate (B)
23	G15 00(00036A	Cabinet Sticker Side
24	F90 000	00617A	Step Mat
25	E30 01	01761A	Step Plate
	MO7 000	00026A	Cabinet Ass'y
	M90 00	0036DA	Speaker Ass'y 8 ohm 10W 12cm
	M90 00	00315A	۲,

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ĺ	£ 2

Video Ass'y TC-V8N22(T)

Control Board Ass'y Pedal Box Ass'y

MO8 00049A MO3 00248A MO1 10002A

SPEAKER, FAN &

VIDEO ASS'Y

Item	Pert No.	Description
	Speaker Ass'y	Speaker Ass'y (M90 00360A) 8 OHM 10W 12cm
7 7	E30 01690A F90 00230A	Speaker Plate Net
en	A60 00014A	Speaker 8 ohm 10W 12cm

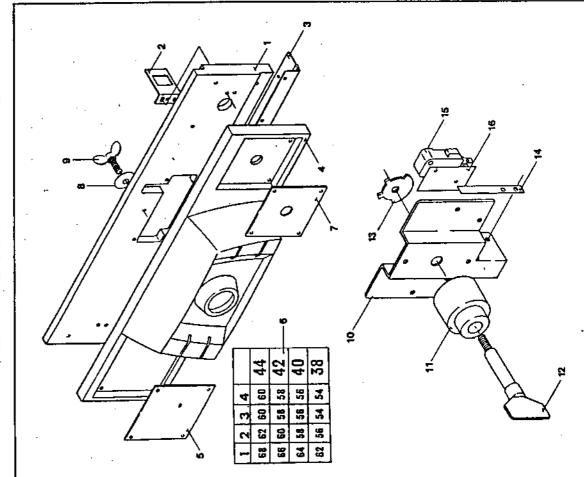
ran Assiy (M90 00315A)	Fan Spacer	Woven Wire Cloth	Fen EB114B-38-2	Fan Bracket	Quitight Q-3	Growner NG-79-C	Spacer	Fan Cover	
1) K. \$8Y	D20 00093A	01372A	A 62 000	01373A	V99000	00004A	¥60000	01370A	
0	D20	E30	C12	E30	F90	F20	E10	E30	
	∢*	'n	9	7	60	6	10	11	

(26,000,000)	Video Ass'y TC-V8N22(T)	
(uctoo) coul (est oats.	MO8 00049A	
	2	

Ass'y (W90 00201A)	Video Board (L)
Main Cabinet As	D20 00143A V
	en

CONTROL BOARD & KEY SWITCH ASS'Y

Description	d Ass'y (MO3 GO248A)	Control Board	Hook	Control Hinge	Desh Board Penel	Instruction Plate	Indication Card	Key Plate	Plain Washer 5.5x22x1,6T	Wing Bolt M5x35	Key Switch Ass'y	Handle Mechanism Ass'y	Ass'y (M90 00371A)	Key Base	Key Bush	Key	Svitch Cam	Can Spring	Micro Svitch AH7155660	Insulator V-Type	-
Part No.	Control Board	D20 00140A	E30 00160A	E50 60068A	F90 00595A	G35 00201A	G35 00206A	G95 00093A	P27 00025A	POS 00078A	M90 00371A	M01 10001A	Key Switch A	E30 00489A	E10 00105A	E30 00488A	£30 00487A	E40 000404	C02 00083A	F90 00150A	
I ce s			7	m	•	50	9	7	60	6				10	11	12	13	14	15	16	



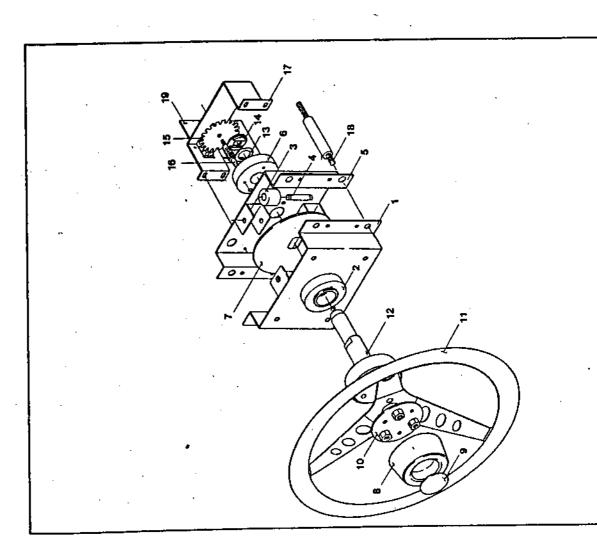
HANDLE MECHANISM ASS'Y

Description

Part No.

Item

Handle Mechanism Asa'y (MO1 10001A)	1 E30 01728A Hub Base (B)	2 E10 00409A Hub	3 H90 00093A Tension Roller	4 ElO 00408A Roller Shaft	5 E30 01727A Hub Base (A)	6 E10 00382A Hub (A)	7 E30 01723A Brake Wheel	8 F90 00158A Steering Cap	9 690 00073A Decoreation Plate	10 E30 00420A Retaining Plate Ass'y	11 F90 00334A Steering Wheel	12 E10 00410A Steering Shaft	13 E10 00379A Spacer	14 E70 00036A Gear (A)	15 E30 00656A Pulse Com	16 E70 00037A Gear (B)	17 E30 01726A Sencor Board Bracket	18 ElO 00406A Joint Shaft	
	-	7	m	∢	٠,	9	7	80	o,	01	11	12	13	14	15	16	11	18	



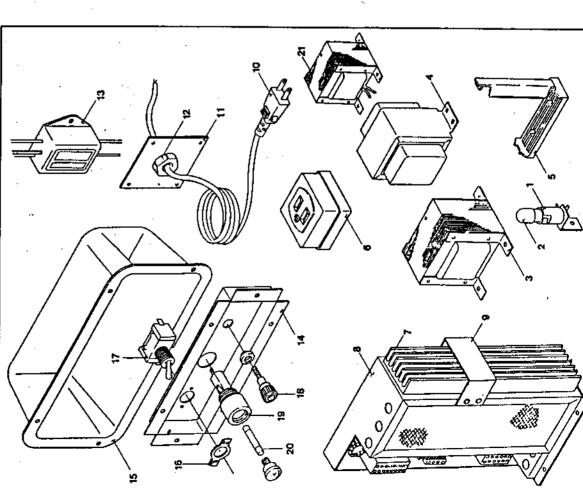
PEDAL BOX & BRAKE MECHANISM ASS'Y

Description	Ass'y (MO1 10002A)	Pedal Box	Pedal Box Support (R)	Pedal Box Support (L)	Accelerator Mechanism Ass'	Brake Mechanism Ass'y	E Herness Ass'y	F Harness Ass'y	Brake Mechanism Ass'y (MO) 10004A)	Peda1	Pedal Bracket	Link	Link Cam	Spring	Base Plate	Bumper Rubber	Micro Switch AH7155660	Insulator W-Type	Tap Plate	Pedal Rubber	
. <u>N</u>	Box	001414	017584	01757A	10003A	10004A	00448A	00449A	e Mechai	01720A	01680A	00404A	00431A	00120A	00432A	00604A	00083A	00150A	00153A	00605A	
Part	Pedel	D20	E30	E30	KO	Š	L90	1.90	Bre	£30	E30	E10	062	E40	E90	F90	C02	F90	£30	F90	
Item			2							e	4	'n	9	7	80	o	10	11	12	13	

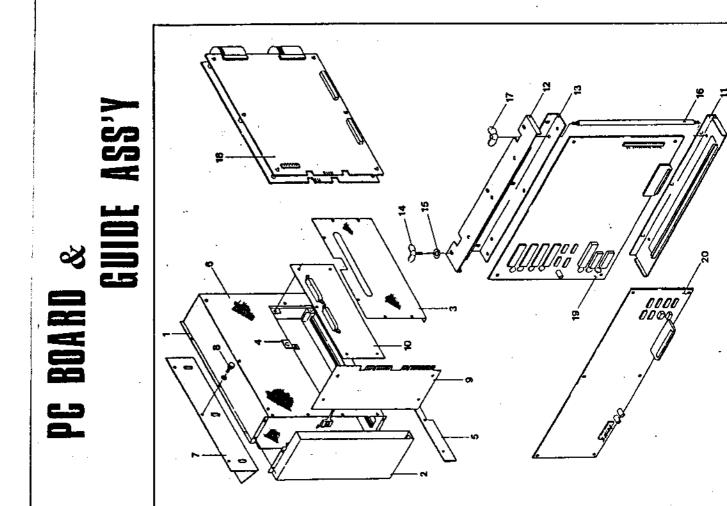
E 4 5 6 6 6 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1
<u>~</u>

SWITCHING & POWER LINE ASS"

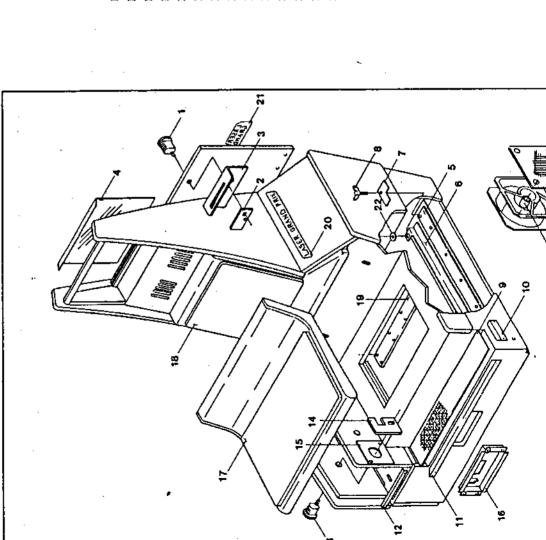
ic Asa'y (W90 00203A) Lamb Socket L-Type	Lemp 1	Transformer Ass'y	Video Transformer	FRC Clamp	AC Receptacle	Switching Regulator Ass'y	Ass'y	Shield Box Ass'y	PC Board Gulde Ass'y - Sound	Ass'y	Main PC Board Ass'y	Timer & Score PC Board Ass'y	ness Ass'y	Z-W-U Harness Ass'y	M Harness Ass'y	Q1-S1 Harness Ass'y	FRC Harness Ass'y 50P Le1300mm	40P	Regulator Ass'y (M41 00006A)	Switching Regulator Asa'y	Regulator Box	Regulator Stop	Ass'y (W90 00205A)	AC Cord	Mold Cord Plate	Mold Cord Bush	Noise Filter ZMB-2206-02	Switch Box	Switch Cover	Guide Plate ON-OFF	Toggle Switch ET125A-12	Earth Terminal	Fuse Holder S-N 2058	Fuse 5A	2 Harness Ass'y	Earth Harness Ass'y	Transformer
Main Electric 1 COS 50204A		3 H9D 00362A	4 C10 00270A	5 F90 00483A	6 COS 50470A	H41 00006A	W90 00205A	M90 00379A	M90 00365A	K20 00032A	M42 00366B	K60 00010B	L10 00038B	L90 00457A	L90 00452A	L90 00455A	. L50 00015B	L50 00016B	Switching Re	7 K30 10006A	8 H90 00092A	9 E30 01687A	Power Line A:	10	11 E30 00897A	12 F90 00144A	13 C1B 00008A	14 E30 00091A	15 F90 00047A	16 G95 00023A	17 CDZ 00020A	18 C06 01002A	19 COS 50144A	20 C16 00037A	L90 00454A	L90 00043A	21 C10 00244A
				ſ												_									<u>.</u>												



Description	Ass'y (M90 00379A)	Shield Box	Filter Board Box	Shield Cover	Board Support Bracket	Guide Rail	Shield Box Cover	Guide Bracket	Rollet Screw M4x10	Filter PC Board Ass'y	FRC Filter PC Board Ass'y	Guide Ass'y (M90 00365A) SOUND	PC Board Guide (A-S)	PC Board Guide (B-S)	Guide Bracket (S)	Wing Bolt M3x10	Plain Washer 3M	Shaft	Wing Nut M3 -	Main PC Board Ass'y	Sound PC Board Ass'y	Timer & Score PC Board Ass	
تر ۳۵۰	Shield Box	00106A	01792A	01790A	01802A	01791A	01845A	01846A	00000A	00123A	00124A	Board G	V66000	00100	01764A	00043A	00004A	00212A	00000	003668	00032A	000104	
Part	Shi	H90	E30	E30	E30	E30	E30	E30	P05	x90	K90	PC	. Н90	Н90	E30	P05	P27	E10	P22	M42	K20	K 60	
Itea		1	7	ຕ	4	n	9	7	ω,	6	10		Ξ	12	13	14	15	16	11	18	19	20	



LASER GRAND PRIX SEAT CABINET ASS'Y



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Description

Part No.

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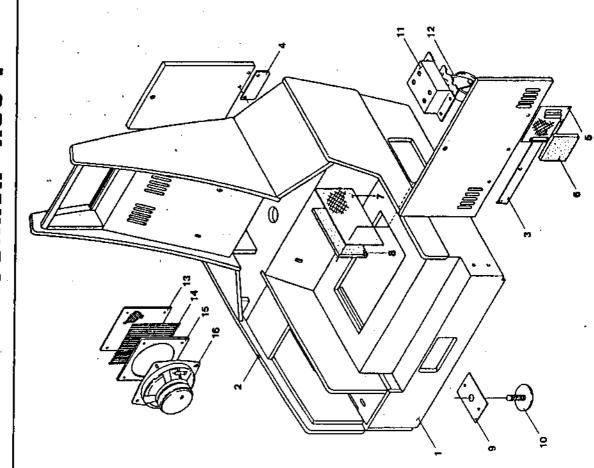
	Laser Grandprix	prix Sear Cabinet Ass'y (W90	90 00202
-	E50 00111A	Service Lock No.8300 Si	Single
7	E30 00008A	Lock Plate Long-Size	
m	E30 00066A	Lock Guard (B)	
4	F90 00600A	Smork	
'n	E30 01702A	Disk Guide	
9	E30 01855A	Disk Stay L	
7	E30 01729A	Disk Stop	
. 40	PO5 00055A	Wing Bolt H4x10	
6	F90 00602A	Seat Met	
01	E30 01695A	Trim L-90am	
11	E30 01697A	Trim L-540mm	
12	E30 01696A	Trim L-180mm	
13	E50 00110A	Service Lock No,8300 Do	Double
14	E30 01686A	Key Lock	
15	E30 01689A	Lock Washer	
16	E30 01710A	Connector Box	
11	F90 00598A	Seat (A)	
18	F90 00599A	Seat (B)	
19	E30 01694A	Seat Bracket	
20	G15 00035A	Seat Sticker Side	
21	G15 00037A	Seat Sticker Back	
22	F90 00635A	Disk Bumper	
23	E30 01716A	Fan Punching	
54	£10 00289A	Board Spacer R	
	MO7 00027A	Seat Cabinet Ass'y	
		Fan Ass'y	
	M90 00300A	Speacker Ass'y 8 ohm 10W	№ 12сш
	M40 00019A	Cash Box Ass'y	
	M90 00372A	Disk Player LD-v1001	
	C51 00001A		GRANDPRIX"
	MO1 10005A	Shift Board Ass'y	
	MOS 00021A	Rejector Board Ass'y	

SEAT GABINET &

SPEAKER ASS'Y

Asa'y (MO7 00027A)	Seat Cabinet	Cabinet Edge Black	-1	Back Door Stopper	Filter Plate (S)	Filter (S)	Filter Plate (L)	Filter (L)	Adjuster Plate	Adjuster	Caster Bracket S	Caster 420R-N, D=38mm
Sear Cabinet	00036A	00042A	01693A	00021A	017184	A70900	01717A	V90900	01762A	V90000	01760A	¥69009
Seal	D30	F90	£30	E30	E30	F90	E30	F90	E 30	E30	E30	E50
	-	7	m	∢,	•	9	7	0 0	6	01	11	12

Speaker Ass'y (M90 00300A) 8 OHM 10W 12cm	Punching Metal	Net	Speaker Board	Spenter 8 obs 100 13-1
Speaker Ass'y	E30 01336A	F90 00230A	D20 00046A	460 000144



FAN, CASH BOX & LASER DISC ASS'Y

Description	Fan Ass'y (M90 00315A)	Fan Spacer	Woven Wire Cloth	Fan EB114B-38-2	Fan Bracket	Quitight Q-3	Grownet NG-79-C	Spacer	Fan Cover	
₹ 0	Ass'y (D20 00093A	01372A	465000	013734	¥99000	00004A	¥60000	E30 01370A	
Part No.	۵ 4	D20	E30	C12	E30	£90	F20	Elo	E30	
Item		-	7	e	4	'n	9	7	00	

Cash Box Ass'y (MO4 00019A)	Cash Box Frame	Cash Box	Dom Lock CS18 R900	Lock Plate (C)	Coin Bracket	Shutter Plate	Disk Player LD-V1001	Laser Disk "LASER GRANDPRIX"
Box Ass	E30: 01721A	E30 01722A	E50 00102A	E30 00177A	E30 01683A	E30 01851A	M90 00372A	CS1 00001A
Cash	E30	E30	E50	E30	E30	E30	06W	C51
	σ	21	11	12	13	7.1	1.5	16

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SHIFT BOARD & LEVER ASS'Y

Shift Board Ass'y (MO1 10005A)

Description

Part No.

Item



	Shife Board	Shift Board Joint	Shift Hinge (S)	Shift Place	Hook	Hook Bracket	Shift Lever Asa'y	AES'Y (MO1 10006A)	Shift Bracket (A)	Rubber Bumper	Tension Spring	Shift Bracket (B)	Micro Switch AH7155660	Insulator V-Type	Tap Plate	Center Shaft	Сат	Shift Lever	Mask	Spacer Rubber	Spacer	Roller	J Harness Ass'y	
-	D20 00145A	E30 01719A	E50 60067A	G95 00092A	E30 00991A	E30 00978A	MO1 10006A	Shift Lever	E30 01724A	F90 00609A	E40 00121A	E30 01725A	C02 00083A	F90 00150A	£30 00153A	E10 00407A	E30 01434A	H90 00094A	F90 00554A	F90 00608A	E30 01459A	E10 00405A	L90 00450A	
		~	m	4	'n	ø			7	9 0	o,	10	11	12	13	14	1.5	16	1,1	18	19	20		

REJECTOR BOARD &

SHUT ASS'Y

Rejector Board Rejector Support

D20 00142A E30 01714A

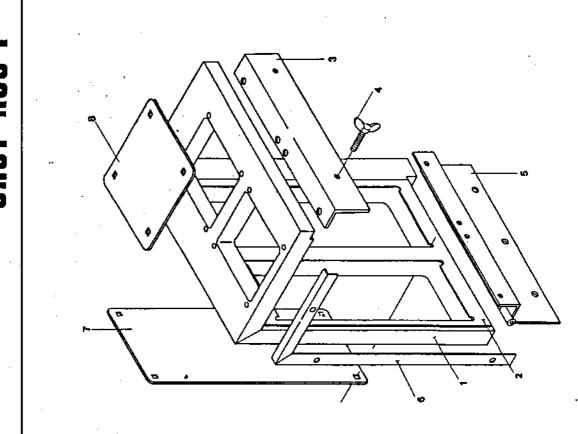
Description

Pert No.

Item

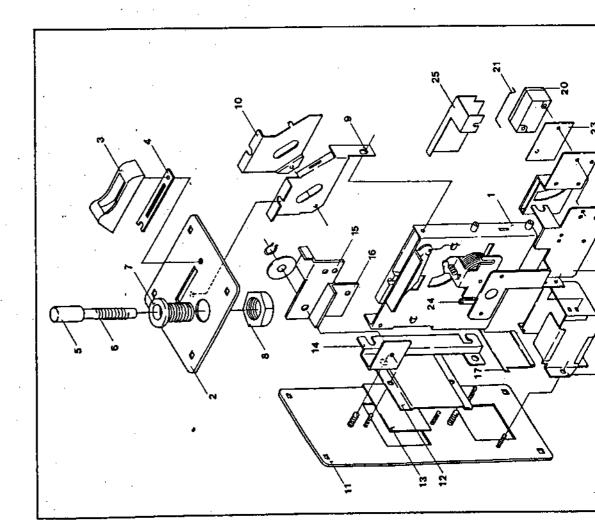
Rejector Board Ass'y

Joint Support	Wing Bolt M4x20	Shift Hinge (L)	Wing Nut M4	Rejector Board Cover	Rejector Ass'y	Rejector Shut Ass'y		Rejector Shut Ass'y 1 Way (MOS 00023A)	Entry Shutter	Entrance Shutter
£30 01715A	POS 00060A	E50 60066A	P22 00007A	E30 01849A		MOS 00023A		ctor Shut	E30 01713A	E30 01767A
230	POS	250	P22	£30		K05		Reje	E30	E30
6	4	•0		9					7	∞



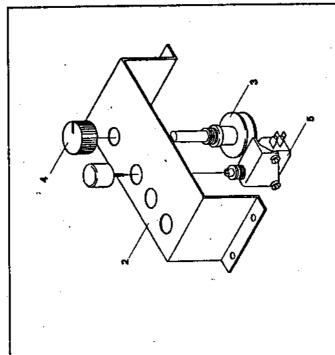
REJECTOR ASS'Y 1WAY

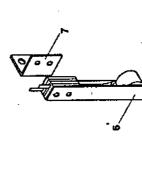
Description	Ass'y	Rejector AD-81PP	Coin Entrance	Coin Entry Molding	Entry Plate	Cancel Button	Cancel Button Spring	Cancel Button Holder	Holder Nut	Coin Chute (A)	Coin Chute (B)	Entry Base	Price Cover	Price Card	Holder Support	Lever (A)	Lever (B)	Cup Door	Cup	Chute Bracket	Micro Switch C-563-3	Actuator CAA-1	MS Coin Guide	Insulator C-5G, Type-3	Coin Lockout Coil DC-12V	Actuator Cover	C Harness Ass'y
Ŷ	Rejector As		A16910	00087A		00403A	00001A	00054A	A 7 0 0 0 0	01681A	01682A	01712A	01227A		01226A	01684A	01685A	01225A	01207A	01206A	00052A	00001A	00285A	00148A	00802A	00180A	
Part	Reje		830	E20		210	E40	E10	E10	E30	E30	E30	E30		E30	E30	E30	E30	E30	E30	C02	C03	E30	F90	C11	E30	
Item		-	7	m	∢*	₩.	9	7	90	6 5	10	11	12	13	14	15	91	17	18	61	20	21	22	23	54	25	

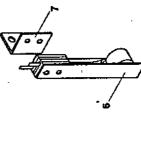


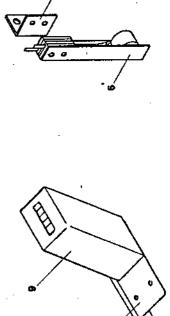
CENTRAL CONTROL & TILL ASS'Y











Description	
No.	
Part	
Item	

AC Socket	Main Seat Harness Ass'y	U Barness Ass'y	K Harness Ass'y	Pl-Ql Harness Ass'y	Central Control Ass'y	Tilt Ass'y
50461A	00039A	00453A	00451A	00456A	00363A	H90 00364A
C05	L 10	1.90	730	1.90	H90	064
	COS 50461A AC Socket		50461A 00039A 00453A	50461A 00039A 00453A 00451A	50461A 00039A 00453A 00451A 00456A	50461A 00039A 00453A 00451A 00456A

00363A)
380€
Asa y
Control
Central

Volume & Switch Bracket	Rotery Switch	Knob	Push Button Switch VAQ-4R
E30 01711A	CO2 00164A	E90 00416A	C02 00033A
2	e	•	'n

Tilt Ass'y (M90 00364A)

CO4 01027A E30 01688A

Tilt Switch Tilt Stay

0 00202A)
64)
A99'y
Cabinet
Seat
Grandprix
Laser

Counter Bracket (110°) Counter ME-5 E30 01850A C17 00008A



LASER GRAND PRIX