MIDWAY

August 1994 16-40036A-101

CRUIS'N USA SINGLE SIT DOWN

PRELIMINARY MANUAL

Operations Manual Includes

- Operations & Adjustments
- Testing & Problem Diagnosis
 - Parts Information
- Reference Diagrams & Schematics

Midway Manufacturing Company 3401 North California Avenue Chicago, Illinois 60618

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WARNINGS & NOTICES

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Warning

USE OF NON-MIDWAY PARTS OR CIRCUIT MODIFICATIONS MAY CAUSE SERIOUS INJURY OR EQUIPMENT DAMAGE! USE ONLY MIDWAY AUTHORIZED PARTS.

* For safety and reliability, substitute parts and modifications are not recommended.

- * Substitute parts or modifications may void FCC type acceptance.
- * This game is protected by Federal Copyright, trademark and patent laws. Unauthorized modifications may be illegal under Federal law. This also applies to MIDWAY logos, designs, publications and assemblies. Moreover, facsimiles of MIDWAY equipment (or any feature thereof) may be illegal under federal law, regardless of whether or not such facsimiles are manufactured with MIDWAY components.

Warning

This equipment generates, uses and can emit radio frequency energy and, if not installed properly and used according to the directions in this manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of part 15 of FCC rules which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference to radio communications, in which the user, at his or her own expense, will be required to take whatever measures may be needed to correct the interference.

Warning

Prevent shock hazard and assure proper game operation. Only plug this game into a properly grounded outlet. Do not use a cheater plug to defeat the power cord's grounding pin. Do not cut off the ground pin.

Notice

When MIDWAY ships a game, it is in compliance with FCC regulations. Your sticker is proof. If the sticker is missing or damaged, legal repercussions to the owner or distributor of the game may result. If your game does not contain an FCC sticker, call **MIDWAY** immediately.

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MIDWAY MANUFACTURING COMPANY 3401 N. CALIFORNIA AVE. CHICAGO, ILLINOIS 60618

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CRUIS'N USA SINGLE SIT DOWN

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Operation

Safety Notices

The following safety instructions apply to all game operators and service personnel. Specific warnings and cautions will be found throughout this manual where they apply. We recommend that you read this page before preparing your game for play.



AC POWER CONNECTION. Before connecting the game to the AC power source, verify that the "line voltage selection chart" jumper wires are installed correctly for the line voltage in your area. For details, refer to Section 3.

PROPERLY GROUND THE GAME. To avoid electrical shocks, do not plug in the game until it has been inspected and properly grounded. MIDWAY games should only be plugged into a grounded 3-wire outlet. Shocks will also result, if the control panel is not properly grounded! After servicing any parts on the panel, be sure that the ground wires are secure. Only then should you lock up the game.

DISCONNECT POWER DURING REPAIRS. To avoid electrical shock, disconnect the game from the AC power source before removing or repairing any part of the game.

USE THE PROPER FUSE. To avoid electrical shock, use the replacement fuse which is specified in the parts list for this game. The replacement fuse must match the original fuse in fuse type, voltage rating, and current rating.

MONITOR PRECAUTIONS. When removing or repairing the monitor, extra precautions must be taken to avoid electrical shock. High voltages may exist within the monitor circuitry and cathode ray tube (CRT) even after power has been disconnected. Do not touch internal parts of the monitor with your hands or metal objects! Always discharge the CRT by the following method: Attach one end of a large, well-insulated, 20-kv jumper to ground. Momentarily touch the free end of the grounded jumper to the anode by sliding it under the anode cap. Wait two minutes and discharge the anode again.

HANDLE FLUORESCENT TUBE AND CRT WITH CARE. If you drop a fluorescent tube or CRT and it breaks, it will implode! Shattered glass can fly eight feet or more from the implosion.

ATTENTION!

PROPERLY ATTACH ALL CONNECTORS. Make sure that the connectors on each printed circuit board (PCB) are properly connected. If the connectors do not slip on easily, do not force them. A reversed connector may damage your game and void the warranty. All connectors are keyed to fit specific pins on each board.

Set-Up Procedure

Game Lo	cation Requirements	-	
<u>Power:</u>	Domestic 115V @ 60 Hz Foreign 230V @ 60 Hz	<u>Dimensions (assembled):</u>	Width: 30" Depth: 61"
<u>Temp.:</u>	32 ⁰ F to 100 ⁰ F (0 ⁰ C to 38 ⁰ C)		Height: 67"
<u>Humidity:</u>	Not to exceed 95% relative.	<u>Weight:</u> Pede Gam	stal. 95 Lbs. e 395 Lbs.

Installation And Inspection

1. Remove all items from shipping containers and set them aside. Inspect the exterior of the cabinet for any signs of damage. Remove shipping cleats from the bottom of the cabinet. Remove pedestal mounting rails packed inside seat liner.

2. Remove keys from the taped coin return slot. Unlock and open the coin and cash box doors. (Leg levelers and spare parts are stored in the cash box).

3. Tilt or lay the cabinet down. Locate two threaded holes on the bottom of the cabinet and install one leg leveler (with its hex nut) in each hole.

4. Stand cabinet upright and make certain it is in a stable position. Level the cabinet.

5. Leg levelers come installed on the pedestal assembly and need only to be leveled before installing onto the cabinet assembly.



6. Attach mounting rails to cabinet base using four 1/4-20 hex-head bolts (see above diagram for proper placement). Do not tighten bolts completely, some movement is required in the mounting rails to align holes with pedestal assembly.

7. Place pedestal assembly on mounting rails. Align the holes and carefully pull the pedestal away. Hold mounting rails in position and tighten bolts inside cabinet.

8. Connect speaker wire from inside pedestal to cabinet. Attach pedestal assembly and bolt together using eight 1/4-20 tamper proof screws. Use the T27 wrench (20-10140), included in the spare parts, to install these screws.

5. Remove rear door of cabinet. Inspect cabinet interior for any signs of damage. Check all major assemblies to assure that they are mounted securely.

6. Refer to the games Cabinet Wiring Diagram (section 3), and check to see that all cable connectors are correctly secured. DO NOT FORCE CONNECTIONS. Watch for damaged connectors and avoid making reversed connections.

8. Determine the value of your line voltage with a meter. Then, check the jumper wire to the main power supply transformer. Be sure it is jumpered to correspond to your local line voltage value. If necessary, change the jumper wire to the transformer in accordance with the Jumper Chart in Section Three.

9. Replace rear cabinet door and screw (lock) it securely. NOTICE: Tamper proof screws are included with the spare parts. These screws are optional and may be used to secure the rear door panel. The T20 wrench (20-9620) is used for the installation of these screws. Close and lock the front coin and cash box doors.

10. To attach line cord, the four Phillips-head screws that mount the line cord cover plate to the rear cabinet. Match the prongs on the plug with the holes in the receptacle and push line cord securely into place. Make sure cord aligns with the indentation of plate (indentation should point toward bottom of cabinet). Remount line cord cover plate. If desired, tamper resistant screws are provided to remount cover plate.

11. Connect the line cord to a grounded (3-terminal) AC wall outlet.

12. Switch ON the game using the ON/OFF switch located on the upper left top of the cabinet, to verify proper operation.

Servicing

Control Panel

Switch OFF power to the game. Using the T27 wrench, remove four tamper proof screws from the monitor glass retaining bracket, and set bracket aside. Remove four tamper proof screws from under the control panel. Pull control panel out and disconnect the wiring. Before reinstalling the control panel, check for proper wire connections, including ground strap.

Remove Viewing Glass

Switch OFF power to the game. Using the T27 wrench, remove four tamper proof screws holding the monitor glass retaining bracket, and set bracket aside. Carefully raise the glass from its bottom grooved edge and lift it clear of cabinet.

Remove Monitor Bezel

Switch OFF power to the game and remove viewing glass (above). Remove bezel from its grooved edge.

Monitor Replacement

We recommend that you read the WARNINGS section thoroughly before beginning this procedure.

Switch OFF power to the game. Remove the viewing glass and the monitor bezel. Completely disconnect the monitor from all of its cabling, including its chassis ground strap.

Remove the six flange nuts securing the monitors mounting flanges to its mounting panel. Pull the monitor carefully from the cabinet front.

CAUTION While removing the six flange nuts, firmly support the monitor from the front of the CRT so that it will not slip.

CAUTION The monitor DOES NOT contain an isolation transformer in its chassis. It is mounted instead in the Power Chassis Assembly locate on the floor of the Cabinet. When servicing the monitor on a test bench, YOU MUST ISOLATE THE MONITOR FROM THE LINE VOLTAGE WITH AN ISOLATION TRANSFORMER.

Remove Marquee Glass

Switch OFF power to the game. Remove five 1/4" hex-head wood screws holding plastic strip above marquee glass. Set strip aside and carefully lift glass. Store glass carefully to prevent damage.

Remove Fluorescent Light Assembly

Switch OFF power to the game. Remove marquee glass (above). Disconnect the fluorescent light assembly from its power cable. Remove the screws fastening the assembly to the cabinet and lift out the assembly.

WARNING

If a fluorescent tube drops and it breaks, it will implode! Use care in handling.

Replace Fluorescent Lamp

Remove marquee glass (above). Remove the fluorescent lamp retainer brackets. Grasp the tube, give it a quarter turn and remove it from its socket. Carefully place a new tube into the socket and turn to reinstall.

Remove Speakers

Switch OFF power to the game. Two speakers are located in the control panel. Remove control panel (see above) to access these speakers.

One speaker is located under the seat. Slide the seat assembly forward, and use the T27 wrench to remove the two tamper proof torque screws from the base of the pedestal assembly. Slide the seat back and remove the two front torque screws. Remove seat assembly to access speaker.

Diagnostics Switches

Open the coin door. The Diagnostics Switches are located on a small bracket inside the coin door.

The Begin Test Switch, closest to the door, activates the game's menu system.

The Volume Up and Volume Down Switches raise and lower the sound level of the game.

The Service Credit Switch, in the back allows credits to be allotted for service testing without affecting the game's bookkeeping total.

Game Features

Crusin' USA is a one player game.

Starting Up

Switch ON power to the game. A "rug" pattern appears on the CRT screen. When the "rug" pattern ends, the screen shows CHECKING SCRATCH RAMS, and then CHECKING ROMS. The next screen shows CRUIS'N USA REVISION LEVEL, CMOS TEST OK, and the COIN SETTING. The game then moves to the Attract Mode.

Insert the desired amount of coins or tokens. Select which player receives the credit by pressing the appropriate Player Start Button.

NOTE: When an error is detected during Start-up Tests, game start-up does not progress, and an error message appears on the screen.

Player Controls

- Player Start Button (Green) The start button allows a player to begin game play.
- Radio Button (Orange)
 The radio button allows a player to listen to the radio and change stations.
- View 1-Low Rider Button (Red) View 1 drives the car from inside.
- View 2-Crus'n Button (White) View 2 drives the car from directly behind.
- View 3-Sky Hi Button (Blue) View 3 drives the car from an arial view.

Game Operation

The Crusin' USA Control Switches are located inside the coin door. These switches allow the operator to customize some features of the game.

CABINET SWITCHES

- The **SLAM TILT SWITCH** detects any forceful vibrations against the Coin Door. This eliminates pounding for free games. It is located on the inside of the coin door.
- The **ON/OFF SWITCH** is located on the right side, top of cabinet.

CONTROL SWITCHES

- The **BEGIN TEST/ENTER SWITCH** allows you to activate the games Menu System. Press the Begin Test Switch to access the Main Menu. To exit the menu system, select EXIT TO GAME OVER from the Main Menu, then press the Begin Test Switch. This switch will be referred to as SW1 throughout the remainder of this section.
- The VOLUME UP/+ SWITCH allows you to cycle forward through the menu selections or adjustment choices, and raises the sound level of the game. This switch will be referred to as SW2 throughout the remainder of this section.
- The **VOLUME DOWN/- SWITCH** allows you to cycle backward through the menu selections or adjustment choices, lowers the sound level of the game. This switch will be referred to as SW3 throughout the remainder of this section.
- The **SERVICE CREDIT/ESCAPE SWITCH** is a special feature switch that allots credit without affecting the game's bookkeeping total. This switch will be referred to as SW4 throughout the remainder of this section.

Menu System Operation

OPERATION

All CRUSIN' USA Game Audits, Adjustments, and Diagnostics are options of the Main Menu. Each option, in turn, has its own menu, listing several choices that you may act upon as desired.

Press the SW1 to activate the Main Menu (shown below). Game adjustments, bookkeeping, and diagnostics are all accessible from this menu.

Press the SW2 or SW3 button to cycle through the menu options. Notice that the options are highlighted in sequence. Press SW1 to activate a highlighted option.

Note: Only highlighted options can be activated.

DIAGNOSTIC TESTS
GAME AUDITS
GAME ADJUSTMENTS
UTILITIES
CALIBRATE CONTROLS
ADJUST VOLUME
EXIT TO GAME OVER

Main Test Menu

DIAGNOSTIC TESTS

To enter the Diagnostic Tests from the Main Menu, press SW2 to highlight that option, then press SW1 to activate.



Diagnostic Test Menu

Switch Test

The Switch Test allows the operator to test the switches on the control panel and the coin door.

Select the Switch Test by pressing SW2 to highlight that option; then press SW1 to activate. Pressing a switch on the control panel or coin door causes the corresponding switch location on the screen to light.

Press SW1 to return to the Diagnostic Menu.

DIP SWITCH TEST

The DIP Switch Test allows the operator to check the position of the two 8-position DIP switches on the CPU Board. The operator can also change the setting of each position of each DIP Switch during this mode.

To enter the test, press SW2 to highlight the DIP Switch Test; then, SW1 to activate. The screen displays a layout of their current settings.

To change a DIP Switch setting, move the switch to the desired setting, then check the screen to verify that the switch now shows the new setting.

Press SW1 to return to the Diagnostic Menu.

CPU Board Test

The CPU Board Test (much like the Start-up Test) allows the operator to check the RAMs and ROMs.

Highlight the CPU Board Test with SW2; then, press SW1 to activate the automatic test of the CPU Board's RAMs and ROMs. When this test is activated, a "rug" pattern appears on the screen. The screen then changes to show the layout of the RAMs and ROMs on the CPU. Any chip that is shown as black with a white outline is part of the CPU and should turn either red or green during the CPU Test. Any chip that is shown as gray with a white outline is not installed in the game. During the test, chips are good, if they turn green; they are faulty, if they turn red.

Sound Test

The Sound Test allows listening to some of the sounds that Crusin' USA is capable of producing. This test also emits a tone for each fault that is detected. After completion of this test, the main menu will be automatically returned to the viewing screen.

Monitor Patterns

The Monitor Patterns Test provides a menu for testing the monitor. Highlight the test with SW2 and activate with SW1. Continue pressing the SW1 button to cycle through the test and automatically return to the Main Menu.

The **COLOR BARS** test fills the screen with several gradated colors to help with red, green and blue level adjustments Each color should appear sharp and clear.

The RED, GREEN, and BLUE SCREEN tests fill the screen with either red, green or blue.

The **CROSSHATCH PATTERNS** test fills the screen with a grid and a series of dots. The grid and the dots should be clear. The dots should appear round.

If any of the Monitor Pattern Tests shows a need for adjustment, use the proper white knobs on the Monitor Board.

Burn-in Test

The Burn-in Test continually repeats the CPU Board Test. Press SW2 to highlight the Burn-in Test; then, press SW1 activate. When the Burn-in Test detects an error, the test stops and displays an error message on the screen. Use this test to find intermittent CPU problems.

To exit this test, switch the game OFF then ON again.

GAME AUDITS

To enter Game Audits from the Main Menu, press SW2 to highlight that option; then, press SW1 to activate. To advance to the next page of the Game Audit Table, press SW2, or press SW1 to exit.

The Game Audits Table records the game play statistics. The left side of the table names the Audit item; the right side shows the amount of play.

LEFT COIN .	0
RIGHT COIN	0
SERVICE CREDITS	0
TOTAL STARTS	0
TOTAL CONTINUES	0
TOTAL ENDS	0
FREE GAMES	0
EVENT	0
UNFINISHED GAMES	0
WATCHDOGS	0
PLAYS UNTIL HIGH SCORE RESET	0

Page 1 of Audit Table

AUTOMATIC SELECT	ED 0
MANUAL SELECTED	
VETTE SELECTED	0.
LABOMBA SELECTE)
DEVASTATOR SELEC	OTED 0
ITALIA SELECTED	0
POWER ON TIME	0
GAME TIME	0

Page 2 of Audit Table

1	-13	

Page 5 of Audit Table	P	age	5	of	Audit	Table
-----------------------	---	-----	---	----	-------	-------

GGATE WINS	0
SANFRAN WINS	0
US101 WINS	0
REDWOOD WINS	0
BEVHILLS WINS	0
LAWINS	0
DEATH VAL WINS	0
ARIZONA WINS	0
GRAND CANYON WINS	0
IOWA WINS	0
CHICAGO WINS	0
INDIANA WINS	0
APPALACHIA WINS	0
DC WINS	0

Page 4 of Audit Table

START GGATE	0
START SF	0
START US101	0
START REDWOOD	0
START BEVHILLS	0
START LA	0
START DV	0

Page 3 of Audit Table

SELECT ARIZONA	0
SELECT US 101	0
SELECT LA	0
SELECT IOWA	0
SELECT DEATH VALLEY	0
SELECT USA	0
SELECT BEV HILLS	0
SELECT APPALACHIA	0
SELECT REDWOOD	0
SELECT RUSHMORE	0
SELECT CHICAGO	0

GAME ADJUSTMENTS

NOTE: Game Adjustments are explained in more detail on the following page.

Press SW2 to highlight the Game Adjustment option on the Main Menu; then, press SW1 to activate.

The Game Adjustments option allows the owner/operator to change the Game Pricing and Game Difficulty.

The Game Adjustments Menu offers several options. Press SW2 to highlight an option; then, press SW1 to activate. The activated item provides a setting choice. Press SW3 to change the current setting value; then, press SW1 to lock in the new setting value.

STANDARD PRICING
CUSTOM PRICING
FREE PLAY
FIRST PLACE AWARDS FREE GAME
GAME DIFFICULTY
TIME TO START
CHECKPOINT BONUS
ATTRACT MODE SOUND
HIGH SCORE ENTRY
MIN VOLUME LEVEL
SPEED IN MPH OR KPH
SPECIAL CD OFFER
EXIT TO MAIN MENU

Game Adjustment Menu

To exit the Adjustments Menu, press SW2 to highlight EXIT TO MAIN MENU; then, press SW1 to activate.

Standard Pricing

Standard Pricing allows the operator to choose any of the "Standard" selections for the Standard Pricing Table.

Custom Pricing

Custom Pricing allows the operator to install pricing other than that of the Standard Pricing Table. Custom Pricing also allows the operator to select the amount of credits required to start a game and the amount of credits required to continue a game. This option is adjusted from the Dip Switch Settings.

Free Play

This option selects free play. The setting choices for this adjustment are:

-Off (factory setting) -On

First Place Awards Free Game

Awards a player a free game on 1st position. The setting choices for this adjustment are:

-On (factory setting)

-Off

Attract-Mode Sounds

Determines whether the game will make sounds in the attract mode. The settings for the adjustment are:

-On

-Off (factory)

Speed in MPH or KPH

This determines speedometer setting in miles per hour or kilometers per hour.

-MPH (factory setting)

-KPH

High Score Entry

This determines whether the game will allow High Score Entry and Display Table. The setting choices are:

-On (factory setting) -Off

Standard Pricing Table

e

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USA 2 USA 3 USA 4 USA 5 USA 6 USA 7 USA 8	Settings Credit/Coin 1/25¢ (2 to Start; 2 to Continue) 1/25¢ (2 to Start; 1 to Continue) 1/25¢ (1 to Start; 1 to Continue) 1/25¢ (1 to Start; 1 to Continue) 1/50¢, 3/\$1.00 (1 to Start; 1 to Continue)	25¢ 25¢	\$1.00 \$1.00	25¢	
USA 2 USA 3 USA 4 USA 5 USA 6 USA 7 USA 8	1/25¢(2 to Start; 1 to Continue)1/25¢(1 to Start; 1 to Continue)		\$1.00		
USA 3 USA 4 USA 5 USA 6 USA 7 USA 8	1/25¢ (1 to Start; 1 to Continue)		· · · · · ·	25¢	
USA 4 USA 5 USA 6 USA 7 USA 8		25¢	\$1.00	25¢	
USA 5 USA 6 USA 7 USA 8		25¢	\$1.00	25¢	
USA 6 USA 7 USA 8	1/50¢, 4/\$1.00 (2 to Start; 1 to Continue)	25¢	\$1.00	25¢	
USA7 USA8		25¢	\$1.00	25¢	
USA 8	1/50¢ (1 to Start; 1 to Continue)	25¢	\$1.00	25¢	
	1/50¢, 3/\$1.00 (1 to Start; 1 to Continue)		\$1.00	25¢	
USAECA	1/50¢, 4/\$1.00 (2 to Start; 2 to Continue)	25¢	\$1.00		54
1	1/25¢, 4/\$1.00 (2 to Start; 2 to Continue)	\$1.00	10¢	25¢	5¢
German 1	1/1DM, 6/5DM	1DM		5DM	
German 2	1/1DM, 7/5DM	1DM		5DM	
German 3	1/1DM, 8/5DM	1DM		5DM	
German 4	1/1DM, 5/5DM	1DM		5DM	
German 5	1/1DM, 6/5DM	1DM		5DM	
German ECA	1/1DM, 2/2DM, 6/5DM	5DM	1DM	2DM	
	2/5F, 5/10F	5F		10F	
	2/5F, 4/10F	5F		10F	
		5F		10F	
France 3	1/5F, 3/10F	5F		10F	
France 4	1/5F, 2/10F	5F		10F	
France 5	2/5F, 5/10F, 11/2x10F			10F	
France 6	2/5F, 4/10F, 9/2x10F	5F		10F	
France 7	1/5F, 3/10F, 7/2x10F	5F		10F	
France 8	1/5F, 2/10F, 5/2x10F	5F		10F	
France 9	1/3x1F, 2/5F	1F		5F	
France 10	1/2x1F, 3/5F	1F		5F	
France 11	1/3x1F, 2/5F, 5/2x5F	1F		5F	
France 12	1/2x1F, 3/5F, 7/2x5F	1F		5F	
France ECA	1/3x1F, 2/5F, 5/2x5F	1F	10F	5F	
	1/2x25¢, 3/\$1.00	25¢		\$1.00	
Canada Cuuina 1	1/1F, 6/5F	1F		5F	
Swiss 1	1/1F, 7/5F	1F		5F	
Swiss 2		1F		5F	
Swiss 3	1/1F, 8/5F	500 lire		500 lire	
Italy	1/500 lire	20P		50P	
UK1	1/20P, 3/50P			50P	
UK2	2/20P, 5/50P	20P	20P	50P	10P
UKECA	1/20P, 3/50P, 7/£1.00	£1.00	201	CCU	IUF
UK Elec w/CCU	1/30P, 2/50P, 4/£1.00	£1.00			
Spain 1	1/100P, 6/500P	100P	-	500P 200P	-
Spain 2	1/4X25, 1/100, 2/200, 5/500	25P	100P		500P
Australia 1	1/3x20¢, 2/\$1.00	20¢		\$1.00	
Australia 2	1/5x20¢, 1/\$1.00	20¢		\$1.00	
Japan 1	1/100 yen	100 yen		100 yen	
Japan 2	2/100 yen	100 yen		100 yen	
Austria 1	1/5 schilling, 2/10 schilling	5 schilling		10 schilling	1
Austria 2	1/2x5 schilling, 3/2x10 schilling	5 schilling		10 schilling	
Belgium 1	1/20F	20F		20F	
Belgium 2	3/20F	20F	1	20F	
	2/20F	20F		20F	
Belgium 3	1/20F	50F	5F	20F	
Belgium ECA		1 krona	-	5 krona	
Sweden	1/3x1 krona, 2/5 krona	20¢		20¢	
New Zealand 1	1/3x20¢	20¢	1	20¢	1
New Zealand 2	1/2x20¢			2.5HFI	
Netherlands	1/1HFI, 3/2.5HFI	1HFI			
Finland	1/1 markka	1 markka		1 markka	
Norway	1/2x1 krone, 3/5x1 krone	1 krone		1 krone	
Denmark	1/2x1 krone, 3/5 krone, 7/2x5 krone	1 krone		5 krone	
Antilles	1/25¢, 4/1 guilder	25¢		1 guilder	
Hungary	1/2x10 forint, 3/2x20 forint	10 forint		20 forint	

Custom Pricing

RET	URN TO MAIN MENU -
(1) L	EFT CHUTE (1) UNITS
(1) F	RIGHT CHUTE (2) UNITS
(1) (CHUTE (3) UNITS
(1) (CHUTE (4) UNITS
(2) L	JNITS/CREDIT
(3) L	JNITS/BONUS
(4) N	AINIMUM UNITS REQUIRED
(5) (CREDITS TO START
(6) (CREDITS TO CONTINUE
(7) (COIN PAGE HELP
(8) 5	SHOW CREDIT FRACTIONS
(9) (COINS PER DOLLAR
(10)	MAXIMUM CREDITS

- (1) Coins inserted accumulate units. This adjustment specifies the number of units given for each coin in the fourth chute (see "units/credit")
- (2) This is the number of coin units required to buy one credit.
- (3) One bonus credit is awarded after this many coin units have accumulated.
- (4) No credits will be awarded until this many coin units have accumulated.
- (5) Each player needs this many credits to begin a game.
- (6) Each player needs this many credits to continue a game.
- (7) Whenever standard pricing is used, a corresponding message is displayed on the credits screen. Setting this to no disables the message.
- (8) When set to yes, fractional credits will be seen on the credits screen.
- (9) The detailed bookkeeping screen shows total collections based on this many coins per dollar. (Set to zero to disable the display of money totals.)
- (10) This is the limit for the credits counter. Additional coins inserted will be lost. Factory setting is 30.

UTILITIES

Press SW2 to highlight the Utilities option on the Main Menu; then, press SW1 to activate.

The Utilities Menu allows the owner/operator to clear the games bookkeeping memory and to install a custom message.



Utilities Menu

Press SW2 to highlight an item from the Utilities Menu; then, press SW1 to activate. After an item has been activated, you are given the option of resetting that item or not. For example:



Press SW3 to choose YES or NO; then, press SW1 to lock your choice and to return to the Utilities Menu.

To exit the Utilities Menu, press SW3 to highlight EXIT TO MAIN MENU; then, press SW1 to activate selection.

Troubleshooting

POSSIBLE SOLUTION PROBLEM Check for faulty video board or monitor. NO PICTURE OR DISTORTED PICTURE. Check for disconnected video signal cable. Check line fuse. Check for +5Vdc at pins C, TURN GAME ON & NOTHING HAPPENS. D, 3, and 4 of the JAMMA Connector. Check the speaker and speaker connection NO SOUND. to pins L and 10 on the JAMMA Connector. Check volume control setting. Check for +12Vdc at pins F and 6 on the JAMMA Check interboard wiring on Connector. CPU Board. Check sound fuses. Check the 1.0A., F.B. fuse located in the NO GENERAL ILLUMINATION. Power Chassis Assembly. Check for open wires between the Joystick MOVE JOYSTICK, BUT PLAYER DOES and CPU Board. Check for contamination NOT MOVE. on joystick switch contacts and CPU Board pins. Check for proper ground. Check for open wires between the button PRESS START BUTTON AND NOTHING and CPU Board. Check for contamination HAPPENS. on CPU Board pins or the button switch blade contacts. Check for proper ground. Check for contamination on coin switch NO CREDIT GIVEN WHEN COINS ARE contacts. Check for an open wire between INSERTED. Coin Switch 1 and pin 16 on the JAMMA Connector or Coin Switch 2 and pin T of the JAMMA Connector. Check Game Pricing setting. Check for a TOO MANY CREDITS FOR NUMBER OF Short between pins T & 16 on the JAMMA COINS INSERTED. Connector. Check that the Test Switch in the coin door GAME STAYS IN THE TEST MODE. and the Test Switch (Position 8) on DIP

Switch 2 are set to Off.

Notes...

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CRUIS'N USA

SECTION

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Parts Information

Cabinet Hardware

Cabinet Assembly	A-17889.1
Lock Retainer Plate	01-7264
Upper Door Lock Cam	01-8989
Leg Leveler Plate	01-9155
Lock Plate	01-11285
Door Bracket	01-11291
Shaft Caster	02-4404
20" Vent Hole Cover	03-7602
Leg Adjuster, 3.0"	08-7377
Door Cam Lock	20-6542-TB
Caster Wheel	20-9627
Coin Door Assembly	09-74000-33
Tamper Proof Screw Tool, T-20	20-9620
#555 Bulb, 6.3v	24-8768
Marquee	31-2005
Marquee Retainer	03-8252-5
Marquee Glass	08-7852

Dash Assembly

Dash Assembly

A-19271

Fluorescent Lamp Assembly

Fluorescent Housing & Bracket	A-15890
Lamp Lock	03-8327
18" Fluorescent Bulb, 15w	24-8809

Monitor

Monitor, 25"	5675-14041-00
Monitor Bezel	03-9098
Monitor Support Bracket	A-19501

Electronic Rack

Electronic Rack CPU Sound Board Assembly Power Supply Switcher Assy. Steering Wheel Driver Assy. Ribbon Cable, 20-pin Ribbon Cable, 20-pin	CPU Sound Board AssemblyA-19233-40033Power Supply Switcher Assy.A-15202-1Steering Wheel Driver Assy.A-18004-40033Ribbon Cable, 20-pin5795-10937-06	Cables Line Voltage Cable Assembly Transformer Jumper Cable	A-19248 H-13378
		G.I. Jumper Cable Fluorescent Lamp Cable	H-15945 H-16303 H-17914
		Switcher Power Cable Control Cable	H-17914 H-18175

Speakers

Four Speed Shift Cable	H-18737
AC Power Pack Cable Cable Bass Speaker Main Harness Cable	H-19251 H-19256 H-19302 H-19357-3
theore original eache	
	Cable Bass Speaker

Transformer Assembly

Power Pack Assembly

A-19244

Seat Assembly

Line Voltage Cable

Pedestal w/Seat Assembly

A-19304

H-18191.1

A-15202-1 Power Supply Switcher Assembly

item Part Nun

mber	Descript	tion 🚽
	0000p	

1.	H-17914	
2.	20-9920	
З.	01-12162	
4.	H-15206	

Switch Power Cable Power Supply Switcher/UL Shield for Switcher Ground Jumper Power Supply Mounting Bracket



A-18004-40033 Wheel Driver Board Assembly

Part Number Designator

A-18005 Wheel Driver Board Assembly 5340-12959-00 U3 1.C. 26LS31 5311-12538-00 U18 1.C. 74HC14 5311-14068-00 U4, U10, U14 1.C. 74HC245 5311-14068-00 U4, U10, U14 1.C. 74HC138 5311-14068-00 U9 1.C. 74HC138 5311-14068-00 U4, U10, U14 1.C. 74HC138 5371-14070-00 U5 1.C. DAC0848 5371-14070-00 U5 1.C. DLN2064B 5700-12047-00 U6 1.C. LM12, Power OP-AMP 5100-13945-02 BR1, BR2 Bridge, 4.0A. 5040-13417-00 C4-C7 Cap., Electrolytic, 100µF, 10v 5040-13417-00 C4-C7 Cap., Electrolytic, 100µF, 10v 5040-13417-00 C4-C7 Cap., Electrolytic, 100µF, 40v 5791-10862-02 P10 Connector, 2-pin Header, 156 5791-10862-02 P10 Connector, 4-pin Header, 156 5791-126500 P6 Connector, 26-pin Rib. Header 5791-126600 P4 Connector, 14-pin Header, 100 5791-1261-00 P4 Connecto	Part Number	Designator	Description
5340-12958-00 U3 I.C. 26LS31 5340-12958-00 U7 I.C. 26LS32 5311-1258-00 U18 I.C. 74HC14 5311-14067-00 U13, U17 I.C. 74HC14 5311-14067-00 U3, U17 I.C. 74HC138 5311-14067-00 U9 I.C. 74HC138 5311-14070-00 U5 I.C. DAC08, D-A Converter 5370-1323-00 U2 I.C. M2064B 5771-14069-00 U6 I.C. LM12, Power OP-AMP 5160-1269-00 O1, O2 Trans. 2N3904 5100-13945-02 BR1, BR2 Bridge, 4.0A. 5040-08986-00 C3 Cap. Electrolytic, 100µF, 10V 5040-14298-00 C36, C38 Cap. Electrolytic, 100µF, 40V 5040-13245-02 P10 Connector, 4-pin Header .156 5791-1066-04 P2 Connector, 4-pin Header .156 5791-1086-02 P10 Connector, 10-pin Header .100 5791-1261-10 P7, P8 Connector, 10-pin Header .100 5791-12640-14 P12 Connector, 10-pin Header .100 5791-1261-10 P6 Conn	A-18005		Wheel Driver Board Assembly
S340-12959-00 U7 I.C. 26LS32 S311-12538-00 U18 I.C. 74HC14 S311-14068-00 U4, U10, U14 I.C. 74HC245 S311-10408-00 U9 I.C. 74HC138 S430-13598-00 U1 I.C. 74HC138 S430-13598-00 U1 I.C. 74HC138 S430-13598-00 U1 I.C. 751608 S372-13022-00 U2 I.C. ADC080, D-A Converter S370-12602-00 U11, U12 I.C. ULN2064B S700-12047-00 U8, U19 Solder Socket, 24-pin, 3* S370-14669-00 U6 I.C. LM12, Power OP-AMP S100-13945-02 BR1, BR2 Bridge, 4.0A. S040-08986-00 C3 Cap, Electrolytic, 100µF, 10V S040-13417-00 C4-C7 Cap, Electrolytic, 10,000µF S791-10862-02 P10 Connector, 2-pin Header .156 S791-10862-02 P10 Connector, 2-pin Header .156 S791-10862-04 P2 Connector, 2-pin Rib. Header S791-10862-02 P10 Connector, 2-pin Rib. Header S791-10805-00 P6 Con		U3	
5311-12538-00 U18 I.C. 74HC14 5311-14068-00 U4, U10, U14 I.C. 74HC245 5311-14068-00 U9 I.C. 74HC33 5430-13598-00 U1 I.C. 751608 5372-13323-00 U2 I.C. ADC0848 5371-14070-00 U5 I.C. DAC08, D-A Converter 5370-12062-00 U11, U12 I.C. ULV2648 5700-12047-00 U8, U19 Solder Socket, 24-pin, 3" 5370-14069-00 G1 I.C. ULV2648 5700-12047-00 U8, U19 Solder Socket, 24-pin, 3" 5370-14069-00 O1 C2 Trans. 2N3904 5100-13945-02 BR1, BR2 Bridge, 4.0A. 5040-08986-00 C3 Cap, Electrolytic, 100µF, 10V 5040-14298-00 C36 C38 Cap, Electrolytic, 100µF, 40V 5040-03982-00 P1 Connector, 4-pin Header 156 5791-12461-04 P12 Connector, 4-pin Header 156 5791-12461-04 P12 Connector, 11-pin Header 156 5791-12461-10 P7, P8 Connector, 10-pin Header 150 5701-14080-00 P6			I.C. 26LS32
5311-14067-00 U13, U17 I.C. 74HC245 5311-14068-00 U4, U10, U14 I.C. 74HC374 5311-14070-00 U3 I.C. 74HC374 5370-12032-00 U1 I.C. 75100B 5370-12047-00 U3 I.C. ADC0848 5370-12047-00 U4, U19 Solder Socket, 24-pin, 3" 5370-12047-00 U6 I.C. LM12, Power OP-AMP 5160-12047-00 U6 I.C. LM12, Power OP-AMP 5160-12047-00 U3, U17 Connector, 2-pin Header.156 5791-12080-00 C3 Cap., Electrolytic, 100µF, 10v 5040-1228-00 C36, C38 Cap., Electrolytic, 10,00µF, 10v 5040-1228-00 C4-C7 Cap., Electrolytic, 10,00µF, 40v 5040-1228-00 C4-C7 Cap., Electrolytic, 10,00µF, 10v 5791-12461-04 P12 Connector, 2-pin Header.156 5791-12461-04 P2 Connector, 10-pin Header.100 5791-12461-11 P5 Connector, 10-pin Header.100 5791-12461-00 P4 Connector, 26-pin Rib. Header 5791-12461-01 P7, P8 Connector, 45-pin Ribbon			I.C. 74HC14
S311-14068-00 U4, U10, U14 I.C. 74HC574 S311-10948-00 U9 I.C. 74HC538 S430-13598-00 U2 I.C. ADC08, D.A Converter S371-14070-00 U5 I.C. DAC08, D.A Converter S370-12602-00 U11, U12 I.C. ULN20648 S700-12047-00 U8, U19 Solder Socket, 24-pin, 3° S370-14069-00 U6 I.C. LM12, Power OP-AMP S160-10269-00 C1, C2 Trans. 2N3904 S100-13945-02 BR1, BR2 Bridge, 4.0A. S040-02298-00 C36, C38 Cap., Electrolytic, 100µF, 40v S040-12298-00 C36, C38 Cap., Electrolytic, 10,000µF S791-10862-02 P10 Connector, 9-pin Header .156 S791-10862-04 P12 Connector, 4-pin Header .100 S791-12461-04 P12 Connector, 10-pin Rib. Header .100 S791-12461-04 P12 Connector, 10-pin Rib. Header .100 S791-12461-01 P7, P8 Connector, 10-pin Header .100 S791-12461-10 P4 Connector, 10-pin Header .100 S791-12461-10 P7, P8 Connector, 10-pin			I.C. 74HC245
S311-10948-00 U9 I.C. 74HC138 S430-13598-00 U1 I.C. 75160B S372-13323-00 U2 I.C. ADC0848 S370-12067-00 U3 I.C. IM2064B S700-12047-00 U8 I.C. LM2064B S700-12047-00 U6 I.C. LM12, Power OP-AMP S160-12047-00 U6 I.C. LM12, Power OP-AMP S160-12047-00 U3 Cap., Electrolytic, 100µF, 10v S040-08986-00 C3 Cap., Electrolytic, 10,0µF, 10v S040-08986-00 C3 Cap., Electrolytic, 10,0µF, 40v S040-08986-00 C3 Cap., Electrolytic, 10,0µF, 40v S040-08986-00 C3 Cap., Electrolytic, 10,0µF, 40v S040-13417-00 C4-C7 Cap., Electrolytic, 10,0µF, 40v S040-0896-00 P1 Connector, 2-pin Header .156 S791-10862-04 P2 Connector, 4-pin Header .100 S791-10862-04 P2 Connector, 2-pin Rib. Header S791-10850-00 P6 Connector, 2-pin Rib. Header S791-10850-00 P6 Connector, 3-pin Ribbon S631-3826-			I.C. 74HC574
5430-13598-00 U1 I.C. 75160B 5372-13323-00 U2 I.C. ADCO848 5370-12602-00 U11, U12 I.C. ULN2064B 5700-12047-00 U8, U19 Solder Socket, 24-pin, 3" 5370-14069-00 U6 I.C. LM12, Power OP-AMP 5160-10269-00 Q1, Q2 Trans. 2N3904 5100-13945-02 BR1, BR2 Bridge, 4.0A. 5040-08986-00 C3 Cap., Electrolytic, 10,000µF, 40v 5040-12288-00 C36, C38 Cap., Electrolytic, 10,000µF, 40v 5040-13417-00 C4-C7 Cap., Electrolytic, 10,000µF, 40v 5791-10862-02 P10 Connector, 2-pin Header. 156 5791-10862-04 P12 Connector, 4-pin Header. 156 5791-10862-04 P12 Connector, 20-pin Rib. Header 5791-10862-00 P3 Connector, 20-pin Rib. Header 5791-10862-00 P4 Connector, 10-pin Header. 100 5791-10862-00 P4 Connector, 34-pin Ribbon 5791-12461-10 P7, P8 Connector, 34-pin Header. 100 5791-14080-00 P4 Connector, 4-pin Header. 100 <td></td> <td></td> <td>I.C. 74HC138</td>			I.C. 74HC138
$5372 \cdot 13323 \cdot 00$ U2 I.C. ADC0848 $5371 \cdot 14070 \cdot 00$ U5 I.C. DAC08, D-A Converter $5370 \cdot 12602 \cdot 00$ U11, U12 I.C. ULN2064B $5700 \cdot 12047 \cdot 00$ U8, U19 Solder Socket, 24-pin, 3" $5370 \cdot 14069 \cdot 00$ G I.C. LM12, Power OP-AMP $5160 \cdot 10269 \cdot 00$ G1, Q2 Trans. 2N3904 $5100 \cdot 13945 \cdot 02$ BR1, BR2 Bridge, 4.0A. $5040 \cdot 03945 \cdot 02$ RB1, BR2 Bridge, 4.0A. $5040 \cdot 03945 \cdot 02$ Cancetor, Cap., Electrolytic, 100µF, 40v $5040 \cdot 03945 \cdot 02$ P10 Connector, -9 pin Header. 156 $5791 \cdot 10862 \cdot 09$ P1 Connector, -1 pin Header. 156 $5791 \cdot 10862 \cdot 04$ P2 Connector, -1 pin Header. 100 $5791 \cdot 12461 \cdot 04$ P2 Connector, -1 pin Header. 100 $5791 \cdot 12461 \cdot 10$ P7, P8 Connector, -26 pin Ribbon $5791 \cdot 12461 \cdot 00$ P4 Connector, -26 pin Ribbon $5791 \cdot 12461 \cdot 00$ P4 Connector, -10 pin Header. 100 $5791 \cdot 12461 \cdot 00$ P4 Connector, -26 pin Ribbon <td></td> <td>U1</td> <td>I.C. 75160B</td>		U1	I.C. 75160B
5370-12002-00U11, U12I.C. ULN2064B5370-12047-00U8, U19Solder Socket, 24-pin, 3"5370-14069-00U6I.C. LM12, Power OP-AMP5160-10269-00Q1, Q2Trans. 2N39045100-13945-02BR1, BR2Bridge, 4.0A.5040-03945-02C36, C38Cap., Electrolytic, 100µF, 40v5040-13417-00C4-C7cap., Electrolytic, 100µF, 40v5791-10862-02P10Connector, 9-pin Header .1565791-10862-04P2Connector, 4-pin Header .1565791-12461-04P12Connector, 4-pin Header .1005791-10862-04P2Connector, 11-pin Header .1005791-10862-04P2Connector, 20-pin Rib. Header .1005791-10862-07P3Connector, 20-pin Rib. Header .1005791-12461-04P12Connector, 10-pin Header .1005791-12461-04P7P8Connector, 20-pin Rib. Header .1005791-12461-00P4Connector, 34-pin Ribbon583-13826-00-Fuse Clips 5x20mm5070-03045-00D5, D6Diode, MR5015510-9622-00L1Inductor, 4.7µH5671-1472-00-Heatsink, 4 Lead TO-35701-14092-00-Thermal Pad For Power AMP4006-0103-08-Mach. Screw, 8-32 x 1/2"4006-01128-00-Nut, 6-32 KEPS4039-1128-00-Nut, 6-32 KEPS5010-13864-00R12, R14Resistor, 100 Ω, 1/8w, 5%5010-13864-00R12, R120Foir Assy, Auto-Insert5010-13864-00R12, R24, R25Resi		U2	
5700-12047-00U8, U19Solder Socket , 24-pin , 3"5370-14069-00U6I.C. LM12, Power OP-AMP5160-10269-00C3Cap., Electrolytic, 100µF, 10V5040-08986-00C3Cap., Electrolytic, 100µF, 10V5040-12298-00C36, C38Cap., Electrolytic, 100µF, 40V5040-13298-02C36, C38Cap., Electrolytic, 10,000µF5791-10862-09P1Connector, 9-pin Header .1565791-10862-09P1Connector, 4-pin Header .1565791-10862-09P2Connector, 4-pin Header .1565791-10862-09P3Connector, 20-pin Rib. Header5791-12461-04P12Connector, 11-pin Header .1005791-12461-10P7, P8Connector, 10-pin Header .1005791-12461-10P7, P8Connector, 34-pin Ribbon5633-13826-00-Fuse Clips Sz0mm5070-09045-00D5, D6Diode, MR5015510-9982-00LED1LED, Red5701-14092-00-Thermal Pad For Power AMP4006-0103-08-Mach. Screw, 6-32 x 1/2"4006-0103-08-Mach. Screw, 6-32 x 1/2"4006-01128-00-Nut, 6-32 KEPS5010-13844-00R121Resistor, 100 Ω, 1/8w, 5%5010-1383-00R33, R34,Resistor, 100 Ω, 1/8w, 5%5010-13844-00R33, R34,Resistor, 100 Ω, 1/8w, 5%5010-13844-00R43, R44, R48,Resistor, 100 Ω, 1/8w, 5%5010-13364-00R42Resistor, 20 Ω, 1/8w, 5%5010-13364-00R42Resistor, 100 Ω, 1/8w, 5%5010-13364-00<	5371-14070-00	U5	I.C. DAC08, D-A Converter
5700-12047-00 U8, U19 Solder Socket, 24-pin, 3" 5370-14069-00 U6 I.C. LM12, Power OP-AMP 5160-10269-00 C3 Cap., Electrolytic, 100µF, 10v 5040-12298-00 C36, C38 Cap., Electrolytic, 100µF, 10v 5040-12298-00 C36, C38 Cap., Electrolytic, 10,00µF 5791-10862-09 P1 Connector, 2-pin Header. 156 5791-10862-04 P2 Connector, 4-pin Header. 156 5791-10862-04 P2 Connector, 10-pin Header. 100 5791-10862-04 P2 Connector, 10-pin Header. 100 5791-12461-10 P7, P8 Connector, 10-pin Header. 100 5791-12461-10 P7, P8 Connector, 34-pin Ribben 5791-12461-10 P7, P8 Connector, 34-pin Ribben 5633-13282-00 LED LED, Red 5701-10428-00 B112, R113 Resistor, 470Ω, 1w, 5% 5010-0308 Mach. Screw, 6-32 x 1/2" 4006-01003-08 Mach. Screw, 8-32 x 1/2" 4006-01103-00 Nut, 6-32 KEPS 4006-01128-00 Nut, 6-32 KEPS 5010-1384-00 R23, R47, Resistor, 100 Ω, 1/8w, 5% 5010-1384-00 R23, R44, R48, Re	5370-12602-00	U11, U12	I.C. ULN2064B
5160-10269-00 Q1, Q2 Trans. 2N3904 5100-13945-02 BR1, BR2 Bridge, 4.0A. 5040-08986-00 C3 Cap., Electrolytic, 100µF, 10v 5040-12299-00 C36, C38 Cap., Electrolytic, 100µF, 40v 5040-13417-00 C4-C7 Cap., Electrolytic, 10,00µF 5791-10862-09 P1 Connector, 2-pin Header.156 5791-10862-04 P2 Connector, 4-pin Header.156 5791-12461-04 P12 Connector, 10-pin Header.100 5791-12461-11 P5 Connector, 10-pin Header.100 5791-12461-10 P7, P8 Connector, 34-pin Ribben 5791-12461-10 P7, P8 Connector, 34-pin Ribbon 5633-13826-00 - Fuse Clips 5x20mm 5070-09045-00 D5, D6 Diode, MR501 5551-0982-200 L1 Inductor, 4.7µH 561-14076-00 - Thermal Pad For Power AMP 4006-0103-08 Mach. Screw, 6-32 x 1/2" 4008-01128-00 Nut, 6-32 KEPS 0310-14093-00 R23, R47, Resistor, 100 Ω, 1/8w, 5% 5010-1384-00 R43, R44, R48, Resistor, 1		U8, U19	
5100-13945-02BR1, BR2Bridge, 4.0A.5040-08986-00C3Cap., Electrolytic, 100µF, 10v5040-12398-00C36, C38Cap., Electrolytic, 100µF, 40v5040-13417-00C4-C7Cap., Electrolytic, 100µF, 40v5791-10862-09P1Connector, 9-pin Header. 1565791-10862-04P2Connector, 4-pin Header. 1565791-12461-04P12Connector, 4-pin Header. 1005791-12461-04P12Connector, 20-pin Rib. Header5791-12461-04P7P8Connector, 20-pin Rib. Header. 1005791-12461-04P7P8Connector, 20-pin Rib. Header5791-12516-00P4Connector, 34-pin Ribbon5633-13826-00-Fuse Clips 5x20mm5070-09045-00D5, D6Diode, MR501551-09822-00L1Inductor, 4.7µH5671-13732-00LED1LED, Red5010-0428-00R112, R113Resistor, 4.7KΩ SIP5705-14076-00-Heatsink, 4 Lead TO-35701-14092-00-Thermal Pad For Power AMP4006-0103-08-Mach. Screw, 6-32 x 1/2"4008-0103-08-Mach. Screw, 6-32 x 1/2"4008-0103-08-Mach. Screw, 8-32 x 1/2"4008-0103-09-Nut, 6-32 KEPS5010-1384-00R23, R47,Resistor, 100 Ω, 1/8w, 5%5010-1384-00R43, R44, R48,Resistor, 100 Ω, 1/8w, 5%5010-13594-00R26Resistor, 150K Ω, 1/4w, 5%5010-13594-00R26Resistor, 150K Ω, 1/4w, 5%5010-03360-0R31, R35<	5370-14069-00	U6	
5040-03986-00C3Cap., Electrolytic, 100µF, 10v5040-12298-00C36, C38Cap., Electrolytic, 10,00µF5040-13298-00C4-C7Cap., Electrolytic, 10,00µF5791-10862-02P1Connector, 9-pin Header. 1565791-10862-04P2Connector, 4-pin Header. 1565791-12461-04P12Connector, 4-pin Header. 1565791-12461-04P12Connector, 20-pin Rib. Header5791-12461-00P3Connector, 20-pin Rib. Header. 1005791-12461-11P5Connector, 10-pin Header. 1005791-12461-10P7, P8Connector, 20-pin Rib. Header5791-12461-10P7, P8Connector, 20-pin Rib. Header5791-12461-10P7, P8Connector, 20-pin Rib. Header5791-12461-10P7, P8Connector, 34-pin Ribbon5631-3826-00LED1LED, Red5510-09822-00L1Inductor, 4.7µH5671-14092-00-Thermal Pad For Power AMP4006-01003-08-Mach. Screw, 6-32 x 1/2"4008-01103-08-Mach. Screw, 6-32 x 1/2"4008-01128-00-Nut, 6-32 KEPS03-9129-Nylon Spacer4-8005-AIWheel Driver Assy., Auto-Insert5010-13593-00R32, R47, R36-R39, R46, R51, R555010-13594-00R425010-13594-00R41, R48, Resistor, 100 Ω, 1/8w, 5%5010-13594-00R41, R48, Resistor, 150K Ω, 1/4w, 5%5010-13594-00R425010-13594-00R425010-13594-00R425010-13594-00R4	5160-10269-00	Q1, Q2	
5040-12298-00C36, C38Cap., Electrolytic, 100µF, 40v5040-13417-00C4-C7Cap., Electrolytic, 10,00µF5791-10862-09P1Connector, 9-pin Header. 1565791-10862-04P2Connector, 4-pin Header. 1565791-12461-04P12Connector, 4-pin Header. 1005791-12461-04P12Connector, 20-pin Rib. Header5791-12461-00P3Connector, 26-pin Rib. Header5791-12461-10P7, P8Connector, 10-pin Header. 1005791-12461-10P7, P8Connector, 34-pin Rib.Header5791-12516-00P4Connector, 34-pin Ribbon5633-13826-00-Fuse Clips 5x20mm5070-09045-00D5, D6Diode, MR501551-09822-00L1Inductor, 4.7µH5671-13732-00LED1LED, Red5010-09362-00SR1-SR3Resistor, 470Ω, 1w, 5%5010-09362-00SR1-SR3Resistor, 47KΩ SIP5705-14076-00-Thermal Pad For Power AMP4006-0103-08-Nut, 6-32 KEPS4406-01128-00-Nut, 6-32 KEPS03-9129-Nylon Spacer4406-01128-00-Nut, 6-32 KEPS5010-13363-00R121Resistor, 100 Ω, 1/8w, 5%5010-1364-00R42Resistor, 100 Ω, 1/8w, 5%5010-13364-00R121Resistor, 100 Ω, 1/8w, 5%5010-13364-00R42Resistor, 100 Ω, 1/8w, 5%5010-13364-00R42Resistor, 100 Ω, 1/8w, 5%5010-13364-00R42Resistor, 20 Ω, 1/8w, 5%5010-13364-00R	5100-13945-02	BR1, BR2	Bridge, 4.0A.
5040-13417-00 C4-C7 Cap., Electrolytic, 10,000µF 5791-10862-09 P1 Connector, 9-pin Header, 156 5791-10862-04 P2 Connector, 2-pin Header, 156 5791-10862-04 P2 Connector, 4-pin Header, 156 5791-12461-04 P12 Connector, 4-pin Header, 100 5791-12461-11 P5 Connector, 20-pin Rib, Header 5791-12461-10 P7, P8 Connector, 26-pin Rib, Header 5791-12451-00 P4 Connector, 34-pin Ribbon 5633-13826-00 - Fuse Clips Sx20mm 5070-09045-00 D5, D6 Diode, MR501 5551-09822-00 LED1 LED, Red 5010-10428-00 R112, R113 Resistor, 470Ω, 1w, 5% 5019-09362-00 SR1-SR3 Resistor, 47KΩ SIP 5705-14076-00 - Heatsink, 4 Lead TO-3 5701-14092-00 - Thermal Pad For Power AMP 4006-01030-08 - Mach. Screw, 6-32 x 1/2" 4006-01030-08 - Nut, 6-32 KEPS 03-9129 - Nyton Spacer 44008-01128-00	5040-08986-00		Cap., Electrolytic, 100µF, 10v
5791-10862-09P1Connector, 9-pin Header, 1565791-10862-04P2Connector, 2-pin Header, 1565791-12461-04P12Connector, 4-pin Header, 11005791-12461-11P5Connector, 20-pin Rib. Header5791-12461-11P5Connector, 20-pin Rib. Header5791-12461-10P7, P8Connector, 10-pin Header, 1005791-12461-10P7, P8Connector, 26-pin Rib. Header5791-12461-10P7, P8Connector, 34-pin Ribbon5633-13826-00-Fuse Clips Sx20mm5070-09045-00D5, D6Diode, MR501551-09822-00L1Inductor, 4.7µH5671-13732-00LED1LED, Red5010-10428-00R112, R113Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 470Ω, 1w, 5%5010-103-08Mach. Screw, 6-32 x 1/2"4008-0103-08Mach. Screw, 6-32 x 1/2"4008-01128-00Nut, 6-32 KEPS03-9129Nylon SpacerA-18005-AIWheel Driver Assy., Auto-Insert5010-1363-00R121Resistor, 100 Ω, 1/8w, 5%R16, R120R30, R33, R34, Resistor, 100 Ω, 1/8w, 5%5010-1359-00R31, R35S010-1359-00R42Resistor, 150K Ω, 1/4w, 5%5010-1359-00R31, R35S010-1359-00R44, R48, Resistor, 150K Ω, 1/4w, 5%5010-1359-00R45, R50, R54, Resistor, 150K Ω, 1/8w, 5%5010-1336-00R45, R50, R54, Resistor, 33 Ω, 1/8w, 5%5010-1336-00	5040-12298-00	C36, C38	Cap., Electrolytic, 100µF, 40v
5791-10862-02P10Connector, 2-pin Header. 1565791-10862-04P2Connector, 4-pin Header. 1565791-12461-04P12Connector, 4-pin Header. 1005791-09437-00P3Connector, 20-pin Rib. Header5791-12461-11P5Connector, 26-pin Rib. Header5791-12461-10P7, P8Connector, 10-pin Header. 1005791-12516-00P4Connector, 26-pin Rib. Header5791-12516-00P4Connector, 34-pin Ribbon5633-13826-00-Fuse Clips 5x20mm5070-09045-00D5, D6Diode, MR501551-09822-00L1Inductor, 4.7µH5671-13732-00LED1LED, Red5010-10428-00SR1-SR3Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 470Ω, 1w, 5%5010-10428-00-Heatsink, 4 Lead TO-35701-14092-00-Thermal Pad For Power AMP4006-0103-08-Mach. Screw, 6-32 x 1/2"4008-0103-08-Nut, 6-32 KEPS4008-0103-08-Nut, 6-32 KEPS4008-01128-00-Nut, 8-32 KEPS03-9129-Nylon Spacer4-1605-AIS010-13364-00R1215010-13364-00R23, R47, R116, R1205010-1359-00R30, R33, R34, Resistor, 10K Ω, 1/8w, 5%5010-1359-00R40, R51, R555010-1359-00R46, R51, R555010-1359-00R425010-1359-00R42601-1359-00R42, R48, R48,	5040-13417-00		Cap., Electrolytic, 10,000µF
5791-10862-04P2Connector, 4-pin Header, 1565791-12461-11P12Connector, 4-pin Header, 1005791-09437-00P3Connector, 20-pin Rib. Header5791-12461-11P5Connector, 20-pin Rib. Header5791-12461-11P7, P8Connector, 10-pin Header, 1005791-12461-10P7, P8Connector, 34-pin Ribbon5633-13826-00-Fuse Clips 5x20mm5070-09045-00D5, D6Diode, MR501551-09822-00L1Inductor, 4.7µH5671-13732-00LED1LED, Red5010-10428-00R112, R113Resistor, 470Q, 1w, 5%5019-09362-00SR1-SR3Resistor, 470Q, 1w, 5%5010-10428-00R112, R113Resistor, 470Q, 1w, 5%5010-10428-00SR1-SR3Resistor, 470Q, 1w, 5%5010-103-08-Mach. Screw, 6-32 x 1/2"4006-01108-00-Nut, 6-32 KEPS4006-01128-00-Nut, 8-32 KEPS03-9129-Nut, 8-32 KEPS03-9129-Nut, 8-32 KEPS03-9129-Nut, 8-32 KEPS5010-1363-00R121Resistor, 100 Ω, 1/8w, 5%5010-1363-00R121Resistor, 100 Ω, 1/8w, 5%5010-13594-00R26Resistor, 10C Ω, 1/8w, 5%5010-133594-00R31, R35Resistor, 33 Ω, 1/8w, 5%5010-13364-00R45, R50, R54,Resistor, 33 Ω, 1/8w, 5%5010-13364-00R1-R16,Resistor, 33 Ω, 1/8w, 5%5010-13364-00R1-R16,Resistor, 33 Ω, 1/8w, 5%5010-13364-00R1-R16,			Connector, 9-pin Header 156
5791-12461-04P12Connector, 4-pin Header. 1005791-12461-11P5Connector, 20-pin Rib. Header5791-12461-10P7, P8Connector, 10-pin Header. 1005791-12516-00P4Connector, 34-pin Ribbon5633-13826-00-Fuse Clips 5x20mm5070-09045-00D5, D6Diode, MR5015551-09822-00L1Inductor, 4.7µH5671-13732-00LED1LED, Red5010-10428-00SR1-SR3Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 470Ω, 1w, 5%5010-10428-00SR1-SR3Resistor, 470Ω, 1w, 5%5010-10428-00-Heatsink, 4 Lead TO-35701-14092-00-Thermal Pad For Power AMP4006-01003-08-Mach. Screw, 6-32 x 1/2"4008-01103-08-Nut, 6-32 KEPS4408-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 6-32 KEPS5010-1363-00R121Resistor, 100 Ω, 1/8w, 5%5010-13593-00R23, R47,Resistor, 100 Ω, 1/8w, 5%5010-13593-00R31, R34, R44, R48,Resistor, 100 Ω, 1/8w, 5%5010-13594-00R26Resistor, 150 K Ω, 1/4w, 5%5010-13594-00R26Resistor, 220 Ω, 1/8w, 5%5010-13359-00R31, R35Resistor, 220 Ω, 1/8w, 5%5010-13359-00R31, R35Resistor, 23 Ω, 1/8w, 5%5010-13364-00R45, R50, R54,Resistor, 33 Ω, 1/8w, 5%5010-13364-00R41, Resistor, 33 Ω, 1/8w, 5%			Connector, 2-pin Header 156
5791-09437-00P3Connector, 20-pin Rib. Header5791-12461-11P5Connector, 11-pin Header .1005791-12461-10P7, P8Connector, 26-pin Rib. Header5791-12516-00P4Connector, 34-pin Ribbon5633-13826-00-Fuse Clips 5x20mm5070-09045-00D5, D6Diode, MR5015551-09822-00L1Inductor, 4.7µH5671-13732-00LED1LED, Red5010-09362-00SR1-SR3Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 4.7KΩ SIP5705-14076-00-Heatsink, 4 Lead TO-35701-14092-00-Thermal Pad For Power AMP4006-01003-08-Mach. Screw, 6-32 x 1/2"4008-01023-08-Nut, 6-32 KEPS4408-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 6-32 KEPS5010-1363-00R121Resistor, 100 Ω, 1/8w, 5%5010-1359-00R121Resistor, 100 Ω, 1/8w, 5%5010-1359-00R43, R44, R48, Resistor, 100 Ω, 1/8w, 5%5010-13594-00R26Resistor, 150 K Ω, 1/4w, 5%5010-03931-00R31, R35Resistor, 100 Ω, 1/8w, 5%5010-133594-00R26Resistor, 220 Ω, 1/8w, 5%5010-133594-00R45, R50, R54, Resistor, 33 Ω, 1/8w, 5%5010-13364-00R45, R50, R54, Resistor, 33 Ω, 1/8w, 5%5010-13364-00R45, R50, R54, Resistor, 33 Ω, 1/8w, 5%5010-13364-00R1-R16, Resistor, 33 Ω,			Connector, 4-pin Header 150
5791-12461-11P5Connector, 11-pin Header .1005791-12861-00P6Connector, 26-pin Rib. Header5791-12461-10P7, P8Connector, 10-pin Header .1005791-12516-00P4Connector, 34-pin Ribbon5633-13826-00-Fuse Clips 5x20mm5070-09045-00D5, D6Diode, MR5015551-09822-00L1Inductor, 4.7µH5671-13732-00LED1LED, Red5010-10428-00R112, R113Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 4.7KΩ SIP5705-14076-00-Heatsink, 4 Lead TO-35701-14092-00-Thermal Pad For Power AMP4006-01003-08-Mach. Screw, 6-32 x 1/2"4008-01003-08-Nut, 6-32 KEPS4008-01128-00-Nut, 6-32 KEPS03-9129-Nut, 6-32 KEPS03-9129-Nylon Spacer A-18005-AI Wheel Driver Assy., Auto-Insert5010-1363-00R23, R47, Resistor, 100 Ω, 1/8w, 5%5010-13593-00R33, R34, R43, R44, R48, R49, R525010-13593-00R30, R33, R34, R46, R51, R555010-09134-00R426010-13372-00R16719Resistor, 1K Ω, 1/8w, 5%5010-13372-00R198010-13364-00R428010-13364-00R45, R50, R54, Resistor, 220 Ω, 1/8w, 5%5010-13364-00R1-R16, R68, R625010-13364-00R41, Resistor, 33 Ω, 1/8w, 5%5010-13365-00R21, R24, R25, R63, R85-R92, R1225010-13365-00			Connector, 4-pin Header 100
5791-10850-00P6Connector, 26-pinRib. Header5791-12461-10P7, P8Connector, 10-pinHeader1005791-12516-00P4Connector, 34-pinRibbon5633-13826-00-Fuse Clips5x20mm5070-09045-00D5, D6Diode, MR501551-09822-00L1Inductor, 4.7µH5671-13732-00LED1LED, Red5010-10428-00R112, R113Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 4.7KΩ SIP5705-14076-00-Heatsink, 4 Lead TO-35705-14076-00-Mach. Screw, 6-32 x 1/2"4006-0103-08-Mach. Screw, 6-32 x 1/2"4006-0103-08-Mach. Screw, 6-32 x 1/2"4006-01128-00-Nut, 6-32 KEPS4406-01128-00-Nut, 8-32 KEPS03-9129-Nylon Spacer A-18005-AI Wheel Driver Assy., Auto-Insert5010-13363-00R121Resistor, 100 Ω, 1/8w, 5%5010-13844-00R43, R44, R48, R49, R525010-09134-00R26Resistor, 10K Ω, 1/8w, 5%5010-13372-00R31, R35Resistor, 150K Ω, 1/4w, 5%5010-13372-00R19Resistor, 220 Ω, 1/8w, 5%5010-13364-00R44, R48, R68, R62Resistor, 33 Ω, 1/8w, 5%5010-13364-00R1-R16, R58, R62Resistor, 33 Ω, 1/8w, 5%5010-13364-00R1-R16, Resistor, 33 Ω, 1/8w, 5%5010-13364-00R1-R16, R27, R119Resistor, 4.7K Ω, 1/8w, 5%5010-13364-00R1-R16, R27, R119 <td></td> <td></td> <td>Connector, 20-pin His. Header 100</td>			Connector, 20-pin His. Header 100
5791-12461-10P7, P8Connector, 10-pin Header .1005791-12516-00P4Connector, 34-pin Ribbon5633-13826-00-Fuse Clips 5x20mm5070-09045-00D5, D6Diode, MR5015551-09822-00L1Inductor, 4.7µH5671-13732-00LED1LED, Red5010-10428-00R112, R113Resistor, 4.7KΩ SIP5705-14076-00-Heatsink, 4 Lead TO-35701-14092-00-Thermal Pad For Power AMP4006-01003-08-Mach. Screw, 6-32 x 1/2"4008-01003-08-Mach. Screw, 6-32 x 1/2"4008-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 8-32 KEPS03-9129-Nylon SpacerA-18005-AIWheel Driver Assy., Auto-Insert5010-1363-00R121Resistor, 100 Ω, 1/8w, 5%5010-13593-00R32, R47,Resistor, 100 Ω, 1/8w, 5%5010-13593-00R42Resistor, 100 Ω, 1/8w, 5%5010-13593-00R26Resistor, 100 Ω, 1/8w, 5%5010-13594-00R42Resistor, 150K Ω, 1/4w, 5%5010-13594-00R42Resistor, 33 Ω, 1/8w, 5%5010-13594-00R45R625010-13594-00R46R54, R50, R54, Resistor, 33 Ω, 1/8w, 5%5010-1364-00R47, R74Resistor, 33 Ω, 1/8w, 5%5010-1364-00R1-R16, Resistor, 33 Ω, 1/8w, 5%5010-13365-00R1-R16, Resistor, 4.7K Ω, 1/8w, 5%5010-13364-00R11-R16, Resistor, 4.7K Ω, 1/8w, 5%5010-13364-00R11-R16, Resistor, 4.7K Ω, 1/8w, 5% <tr< td=""><td></td><td></td><td>Connector 26-pin Bib Header</td></tr<>			Connector 26-pin Bib Header
5791-12516-00P4Connector, 34-pin Ribbon5633-13826-00-Fuse Clips 5x20mm5070-09045-00D5, D6Diode, MR5015551-09822-00L1Inductor, 4.7µH5671-13732-00LED1LED, Red5010-10428-00R112, R113Resistor, 470Ω, 1w, 5%5019-09382-00SR1-SR3Resistor, 470Ω, 1w, 5%5705-14076-00-Heatsink, 4 Lead TO-35705-14076-00-Heatsink, 4 Lead TO-35701-14092-00-Mach. Screw, 6-32 x 1/2"4008-01003-08-Mach. Screw, 8-32 x 1/2"4008-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 8-32 KEPS939129-Nylon Spacer A-18005-Al Wheel Driver Assy., Auto-Insert5010-13863-00R121Resistor, 100 Ω, 1/8w, 5%5010-13844-00R43, R44, R48, R49, R52Resistor, 100 Ω, 1/8w, 5%5010-13593-00R30, R33, R34, R46, R51, R55Resistor, 150K Ω, 1/4w, 5%5010-13594-00R42Resistor, 150K Ω, 1/4w, 5%5010-13594-00R42Resistor, 150K Ω, 1/4w, 5%5010-13594-00R42Resistor, 33 Ω, 1/8w, 5%5010-13594-00R44Resistor, 33 Ω, 1/8w, 5%5010-13372-00R19Resistor, 33 Ω, 1/8w, 5%5010-13372-00R19Resistor, 33 Ω, 1/8w, 5%5010-13365-00R45, R50, R54, R76-R83, R85-R92, R1225010-13364-00R1-R16, R27, R119Resistor, 75KΩ, 1/8w, 5%5010-13365-00R21, R24, R25, R27, R2119Resistor,			Connector, 10-pin Header, 100
5633-13826-00Fuse Clips 5x20mm5070-09045-00D5, D65551-09822-00L11Inductor, 4.7µH5671-13732-00LED11LED, Red5010-10428-00R112, R113705-14076-00-5705-14076-00-706-0103-08-707-14092-00-708-0103-08-709-0103-08-709-0103-08-7008-0103-08-701-14092-00-701-14092-00-701-14092-00-701-14092-00-701-14092-00-701-14092-00-701-14092-00-701-14092-00-701-14092-00-701-14092-00-701-14092-00-701-14092-00-701-14092-00-701-14092-00-701-14092-00-701-14093-00R23, R47, Resistor, 0 Ω, 1/8w, 5%7010-1363-00R121701-1363-00R121701-13593-00R43, R44, R48, R49, R527010-13593-00R427010-13593-00R31, R357010-13593-00R31, R357010-13593-00R427010-13593-00R427010-13593-00R31, R357010-13594-00R267010-13594-00R267010-13594-00R267010-13594-00R67-R747010-13594-00R67-R747010-13594-00R67-R747010-13594-00R			
50005000D5, D6Diode, MR5015070-09045-00D5, D6Diode, MR5015551-09822-00L1Inductor, 4.7µH5671-13732-00LED1LED, Red5010-10428-00R112, R113Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 4.7KΩ SIP5705-14076-00-Heatsink, 4 Lead TO-35701-14092-00-Thermal Pad For Power AMP4006-01003-08-Mach. Screw, 6-32 x 1/2"4008-01003-08-Mach. Screw, 8-32 x 1/2"4406-01128-00-Nut, 6-32 KEPS03-9129-Nut, 8-32 KEPS03-9129-Nut, 8-32 KEPS03-9129-Nylon Spacer A-18005-AI Wheel Driver Assy., Auto-Insert5010-1363-00R121Resistor, 100 Ω, 1/8w, 5%5010-13644-00R43, R44, R48, R49, R52Resistor, 100 Ω, 1/8w, 5%5010-13593-00R30, R33, R34, R46, R51, R55Resistor, 10K Ω, 1/8w, 5%5010-13594-00R42Resistor, 150K Ω, 1/4w, 5%5010-13372-00R19Resistor, 220 Ω, 1/8w, 5%5010-13372-00R45, R50, R54, R58, R62Resistor, 33 Ω, 1/8w, 5%5010-13364-00R1-R16, R45, R50, R54, R58, R62Resistor, 33 Ω, 1/8w, 5%5010-13364-00R1-R16, R45, R50, R54, R58, R62Resistor, 33 Ω, 1/8w, 5%5010-13365-00R41, R42, R25, R27, R119Resistor, 75KΩ, 1/8w, 5%5010-14065-00R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00R41Resistor, 75KΩ, 1/8w, 5% <td></td> <td>P4</td> <td></td>		P4	
5551-09822-00L1Inductor, 4.7μH5671-13732-00LED1LED, Red5010-10428-00R112, R113Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 4.7KΩ SIP5705-14076-00-Heatsink, 4 Lead TO-35701-14092-00-Thermal Pad For Power AMP4006-01003-08-Mach. Screw, 6-32 x 1/2"4008-0103-08-Mach. Screw, 8-32 x 1/2"4008-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 8-32 KEPS03-9129-Nylon Spacer A-18005-Al Wheel Driver Assy., Auto-Insert5010-13363-00R23, R47,Resistor, 100 Ω, 1/8w, 5%5010-13363-00R121Forther Assy, Auto-Insert5010-13593-00R30, R33, R34,Resistor, 100 Ω, 1/8w, 5%S010-13593-00R30, R33, R34,Resistor, 10K Ω, 1/8w, 5%S010-13594-00R26Resistor, 150K Ω, 1/4w, 5%S010-13372-00R19R19Resistor, 2K Ω, 1/4w, 5%S010-13364-00R45, R50, R54,Resistor, 33 Ω, 1/8w, 5%S010-13371-00R14R26Resistor, 33 Ω, 1/8w, 5%S010-13365-00R21, R24, R25,S010-13371-00R14R27, R119S010-14065-00R41S010-14065-00R41R27, R119S010-14065-00R41S010-14065-00R41R41Resistor, 75KΩ, 1/8w, 5%S731-14094-00F1, F2Fuse, 4ASB, 5x20mm </td <td></td> <td></td> <td></td>			
567 1-13732-00LED1LED1LED, Red567 1-13732-00R112, R113Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 4.7KΩ SIP5705-14076-00-Heatsink, 4 Lead TO-35701-14092-00-Thermal Pad For Power AMP4006-01003-08-Mach. Screw, 6-32 x 1/2"4008-01003-08-Mach. Screw, 8-32 x 1/2"4008-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 6-32 KEPS03-9129-Nylon Spacer A-18005-AI Wheel Driver Assy., Auto-Insert5010-14093-00R23, R47,Resistor, 100 Ω, 1/8w, 5%S10-1363-00R121S010-1363-00R121R43, R44, R48,Resistor, 100 Ω, 1/8w, 5%S010-13593-00R30, R33, R34,Resistor, 100 Ω, 1/8w, 5%S010-09134-00R42R66, R1155010-0934-00R31, R35Resistor, 150K Ω, 1/4w, 5%5010-13594-00R31, R35Resistor, 150K Ω, 1/8w, 5%5010-13594-00R42R67-R74Resistor, 220 Ω, 1/8w, 5%5010-13372-00R19R45, R50, R54,Resistor, 33 Ω, 1/8w, 5%5010-1336-00R1-R16,R76-R83, R85-R92, R1225010-13371-00R14Resistor, 330 Ω, 1/8w, 5%5010-13365-00R21, R24, R25,Resistor, 75KΩ, 1/8w, 5%5010-13365-00R21, R24, R25,Resist			
5010-10428-00R112, R113Resistor, 470Ω, 1w, 5%5019-09362-00SR1-SR3Resistor, 4.7KΩ SIP5705-14076-00-Heatsink, 4 Lead TO-35701-14092-00-Thermal Pad For Power AMP4006-01003-08-Mach. Screw, 6-32 x 1/2"4008-010128-00-Nut, 6-32 KEPS4406-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 8-32 KEPS03-9129-Nut, 8-32 KEPS03-9129-Nylon SpacerA-18005-AIWheel Driver Assy., Auto-Insert5010-13363-00R121Resistor, 100 Ω, 1/8w, 5%5010-13844-00R43, R44, R48,Resistor, 100 Ω, 1/8w, 5%5010-13593-00R30, R33, R34,Resistor, 10K Ω, 1/8w, 5%5010-09134-00R42Resistor, 150K Ω, 1/4w, 5%5010-09314-00R42Resistor, 150K Ω, 1/4w, 5%5010-0931-00R31, R35Resistor, 150K Ω, 1/4w, 5%5010-13594-00R26Resistor, 1K Ω, 1/8w, 5%5010-13594-00R45, R50, R54,Resistor, 33 Ω, 1/8w, 5%5010-13372-00R19Resistor, 220 Ω, 1/8w, 5%5010-13371-00R1-R16,Resistor, 33 Ω, 1/8w, 5%5010-13371-00R114Resistor, 33 Ω, 1/8w, 5%5010-13365-00R21, R24, R25,Resistor, 4.7K Ω, 1/8w, 5%5010-13365-00R41Resistor, 75KΩ, 1/8w, 5%5010-13065-00R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00R41Resistor, 75KΩ, 1/8w, 5% <tr< td=""><td></td><td></td><td>•</td></tr<>			•
5010-09362-00SR1-SR3Resistor, $4.7K\Omega$ SIP5010-09362-00-Heatsink, 4 Lead TO-35701-14092-00-Thermal Pad For Power AMP4006-01003-08-Mach. Screw, $6-32 \times 1/2"$ 4008-01003-08-Mach. Screw, $6-32 \times 1/2"$ 4406-01128-00-Nut, $6-32$ KEPS4408-01128-00-Nut, $8-32$ KEPS03-9129-Nylon Spacer A-18005-AI Wheel Driver Assy., Auto-Insert5010-13363-00R121Resistor, 100Ω , $1/8w$, 5%5010-13363-00R121Resistor, 100Ω , $1/8w$, 5%5010-13844-00R43, R44, R48, R49, R52Resistor, 100Ω , $1/8w$, 5%5010-09134-00R42Resistor, $10K \Omega$, $1/8w$, 5%5010-0359-00R30, R33, R34, R46, R51, R55Resistor, $10K \Omega$, $1/4w$, 5%5010-03594-00R26Resistor, $1K \Omega$, $1/8w$, 5%5010-13372-00R19Resistor, 220Ω , $1/8w$, 5%5010-13364-00R45, R50, R54, R58, R62Resistor, $33 \Omega \Omega$, $1/8w$, 5%5010-13371-00R114Resistor, $33 \Omega \Omega$, $1/8w$, 5%5010-13371-00R41Resistor, $4X \Omega$, $1/8w$, 5%5010-13365-00R21, R24, R25, R27, R119Resistor, $75K\Omega$, $1/8w$, 5%5010-14065-00R41Resistor, $75K\Omega$, $1/8w$, 5%5			
Solo 301 00Heatsink, 4 Lead TO-35705-14076-00-5701-14092-00-4006-01003-08-Mach. Screw, 6-32 x 1/2"4008-01003-08-4408-01128-00-At08-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 6-32 KEPS03-9129-Nut, 6-32 KEPS03-9129-Nut, 8-32 KEPS03-9129R23, R47, Resistor, 100 Ω , 1/8w, 5%5010-13363-00R42R52Resistor, 100 Ω , 1/8w, 5%5010-13371-00R45, R50, R54, Resistor, 33 Ω , 1/8w, 5%5010-13365-00R21, R24, R25, Resistor, 330 Ω , 1/8w, 5%5010-13365-00R41R21, R24, R25, R27, R1195010-14065-00R415010-1406			-
5701-14092-00-Thermal Pad For Power AMP4006-01003-08-Mach. Screw, 6-32 x 1/2"4008-01003-08-Mach. Screw, 8-32 x 1/2"4406-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 8-32 KEPS03-9129-Nylon SpacerA-18005-AIWheel Driver Assy., Auto-Insert5010-13063-00R23, R47,Resistor, 100 Ω , 1/8w, 5%5010-13363-00R121Resistor, 100 Ω , 1/8w, 5%5010-13844-00R43, R44, R48,Resistor, 100K Ω , 1/8w, 5%5010-13593-00R30, R33, R34,Resistor, 10K Ω , 1/8w, 5%5010-09134-00R42R42Resistor, 150K Ω , 1/4w, 5%5010-08931-00R31, R355010-13372-00R19R19Resistor, 220 Ω , 1/8w, 5%5010-13596-00R45, R50, R54,R45, R50, R54,Resistor, 33 Ω , 1/8w, 5%5010-13371-00R114R114Resistor, 330 Ω , 1/8w, 5%5010-13371-00R114S010-14065-00R41R41Resistor, 75K Ω , 1/8w, 5%5010-14065-00R41R41Resistor, 75K Ω , 1/8w, 5%5010-14065-00R41R45, R50, R54,Resistor, 4.7K Ω , 1/8w, 5%5010-14065-00R41R41Resistor, 75K Ω , 1/8w, 5%5010-14065-00R41R41Resistor, 75K Ω , 1/8w, 5%5010-14065-00R41R41Resistor, 75K Ω , 1/8w, 5%5010-14065-00R41R45 </td <td></td> <td></td> <td>Heatsink, 4 Lead TO-3</td>			Heatsink, 4 Lead TO-3
$\begin{array}{rcrcrc} \mbode{A} 01003-08 & - & \mbode{A} Mach. Screw, 6-32 \times 1/2" \\ \mbode{A} 008-01003-08 & - & \mbode{A} Mach. Screw, 8-32 \times 1/2" \\ \mbode{A} 4008-0103-08 & - & \mbode{A} Mach. Screw, 8-32 \times 1/2" \\ \mbode{A} 406-01128-00 & - & \mbode{N} Nut, 6-32 \mbode{KEPS} \\ \mbode{A} 408-01128-00 & - & \mbode{N} Nut, 8-32 \mbod{KEPS} \\ \mbode{A} 408-01128-00 & - & \mbod{N} Nut, 8-32 \mbod{KEPS} \\ \mbod{A} 408-01128-00 & - & \mbod{N} Nut, 8-32 \mbod{KEPS} \\ \mbod{A} 408-01128-00 & - & \mbod{N} Nut, 8-32 \mbod{KEPS} \\ \mbod{A} 408-01128-00 & - & \mbod{N} Nut, 8-32 \mbod{KEPS} \\ \mbod{A} -18005-Al & & \mbod{N} Vlon \mbod{Spacer} \\ \$		-	Thermal Pad For Power AMP
4008-01003-08-Mach. Screw, 8-32 x 1/2"4406-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 8-32 KEPS03-9129-Nylon SpacerA-18005-AIWheel Driver Assy., Auto-Insert5010-14093-00R23, R47, Resistor, 0 Ω , 1/8w, 5%5010-13363-00R121Resistor, 100 Ω , 1/8w, 5%5010-13844-00R43, R44, R48, Resistor, 100K Ω , 1/8w, 5%5010-13593-00R30, R33, R34, Resistor, 10K Ω , 1/8w, 5%5010-13593-00R30, R33, R34, Resistor, 10K Ω , 1/8w, 5%5010-09134-00R42Resistor, 150K Ω , 1/4w, 5%5010-13594-00R26Resistor, 1K Ω , 1/8w, 5%5010-13372-00R19Resistor, 220 Ω , 1/8w, 5%5010-13372-00R19Resistor, 220 Ω , 1/8w, 5%5010-13364-00R1-R16, Resistor, 33 Ω , 1/8w, 5%5010-13371-00R114Resistor, 330 Ω , 1/8w, 5%5010-13365-00R21, R24, R25, Resistor, 4.7K Ω , 1/8w, 5%5010-13365-00R41Resistor, 75K Ω , 1/8w, 5%5010-14065-00R41Resistor, 75K Ω , 1/8w, 5%5010-14065-00R41Resistor, 75K Ω , 1/8w, 5%		-	
4406-01128-00-Nut, 6-32 KEPS4408-01128-00-Nut, 8-32 KEPS03-9129-Nylon SpacerA-18005-AIWheel Driver Assy., Auto-Insert5010-14093-00R23, R47,Resistor, 0 Ω , 1/8w, 5%5010-13363-00R121Resistor, 100 Ω , 1/8w, 5%5010-13844-00R43, R44, R48,Resistor, 100K Ω , 1/8w, 5%F010-13593-00R30, R33, R34,Resistor, 10K Ω , 1/8w, 5%R36-R39, R46, R51, R55R59, R63-R66, R1155010-09134-00R42R42Resistor, 150K Ω , 1/4w, 5%5010-13594-00R26R63-R66, R1155010-08931-00R31, R35S010-13372-00R19Resistor, 220 Ω , 1/8w, 5%5010-13372-00R45, R50, R54,Resistor, 220 Ω , 1/8w, 5%5010-13364-00R1-R16,R1-R16,Resistor, 330 Ω , 1/8w, 5%5010-13371-00R114Resistor, 330 Ω , 1/8w, 5%5010-13365-00R21, R24, R25,S010-13365-00R41S010-14065-00R41R41Resistor, 75K Ω , 1/8w, 5%S010-14065-00R41R41Resistor, 75K Ω , 1/8w, 5%S010-14065-00		-	Mach. Screw, 8-32 x 1/2"
4408-01128-00 03-9129-Nut, 8-32 KEPS Nylon SpacerA-18005-AlWheel Driver Assy., Auto-Insert $5010-14093-00$ R23, R47, R116, R120Resistor, 0 Ω, 1/8w, 5% R116, R120 $5010-13363-00$ R121Resistor, 100 Ω, 1/8w, 5% R49, R52 $5010-13844-00$ R43, R44, R48, R49, R52Resistor, 100K Ω, 1/8w, 5% R36-R39, R46, R51, R55 R59, R63-R66, R115 $5010-09134-00$ R42Resistor, 10K Ω, 1/8w, 5% S010-13594-00 $5010-13594-00$ R26Resistor, 150K Ω, 1/4w, 5% S010-13372-00 $5010-0999-00$ R67-R74Resistor, 220 Ω, 1/8w, 5% S010-13372-00 $5010-13364-00$ R45, R50, R54, R58, R62Resistor, 33 Ω, 1/8w, 5% R76-R83, R85-R92, R122 $5010-13371-00$ R114Resistor, 330 Ω, 1/8w, 5% R27, R119 $5010-14065-00$ R41Resistor, 75KΩ, 1/8w, 5% Fuse, 4ASB, 5x20mm		-	
03-9129Nylon SpacerA-18005-AlWheel Driver Assy., Auto-Insert5010-14093-00R23, R47,Resistor, 0 Ω, 1/8w, 5%R116, R1205010-13363-00R121Resistor, 100 Ω, 1/8w, 5%5010-13844-00R43, R44, R48,Resistor, 100 Ω, 1/8w, 5%S010-13593-00R30, R33, R34,Resistor, 10K Ω, 1/8w, 5%R49, R525010-13593-00R30, R33, R34,Resistor, 10K Ω, 1/8w, 5%R59, R63-R66, R1155010-09134-00R42R42Resistor, 150K Ω, 1/4w, 5%5010-13594-00R26R26Resistor, 1K Ω, 1/8w, 5%5010-13372-00R19R67-R74Resistor, 220 Ω, 1/8w, 5%5010-13372-00R45, R50, R54,R58, R625010-13364-00R1-R16,R114Resistor, 330 Ω, 1/8w, 5%5010-13371-00R114R14Resistor, 330 Ω, 1/8w, 5%5010-13365-00R21, R24, R25,S010-14065-00R41R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00R41R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00R41		-	Nut, 8-32 KEPS
A-18005-AlWheel Driver Assy., Auto-Insert5010-14093-00R23, R47,Resistor, 0 Ω, 1/8w, 5%5010-13363-00R121Resistor, 0 Ω, 1/8w, 5%5010-13844-00R43, R44, R48,Resistor, 100 Ω, 1/8w, 5%5010-13593-00R30, R33, R34,Resistor, 10K Ω, 1/8w, 5%5010-13593-00R30, R33, R34,Resistor, 10K Ω, 1/8w, 5%5010-09134-00R42Resistor, 150K Ω, 1/4w, 5%5010-09134-00R42Resistor, 150K Ω, 1/4w, 5%5010-09134-00R42Resistor, 1K Ω, 1/8w, 5%5010-13594-00R26Resistor, 1K Ω, 1/8w, 5%5010-13372-00R19Resistor, 220 Ω, 1/8w, 5%5010-13369-00R45, R50, R54,Resistor, 33K Ω, 1/8w, 5%5010-13364-00R1-R16,Resistor, 33 Ω, 1/8w, 5%5010-13371-00R114Resistor, 330 Ω, 1/8w, 5%5010-13365-00R21, R24, R25,Resistor, 4.7K Ω, 1/8w, 5%5010-13365-00R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00R41Resistor, 75KΩ, 1/8w, 5%		-	
Solid 14050 colR116, R1205010-13363-00R121Resistor, 100 Ω, 1/8w, 5%5010-13844-00R43, R44, R48, Resistor, 10K Ω, 1/8w, 5%R49, R525010-13593-00R30, R33, R34, Resistor, 10K Ω, 1/8w, 5%R36-R39, R46, R51, R55R59, R63-R66, R1155010-09134-00R42R42Resistor, 150K Ω, 1/4w, 5%5010-13594-00R26R26Resistor, 1K Ω, 1/8w, 5%5010-08931-00R31, R35S010-13372-00R19R19Resistor, 220 Ω, 1/8w, 5%5010-13596-00R45, R50, R54, Resistor, 33K Ω, 1/8w, 5%S010-13364-00R1-R16, Resistor, 330 Ω, 1/8w, 5%S010-13371-00R114S010-13365-00R21, R24, R25, Resistor, 4.7K Ω, 1/8w, 5%S010-13365-00R41S010-14065-00R41R41Resistor, 75KΩ, 1/8w, 5%S010-14065-00R41R41Resistor, 75KΩ, 1/8w, 5%S010-14065-00R41R41Resistor, 75KΩ, 1/8w, 5%S010-14065-00R41R41Resistor, 75KΩ, 1/8w, 5%S010-14065-00R41S010-14065-00R41R41Resistor, 75KΩ, 1/8w, 5%S010-14065-00R41R41Resistor, 75KΩ, 1/8w, 5%S010-14065-00R41S010-14065-00R41R41Resistor, 75KΩ, 1/8w, 5%S010-14065-00R41S010-14065-00R41S010-14065-00R41S010-14065-00R41S010-14065-00R41 </td <td></td> <td></td> <td>Wheel Driver Assy., Auto-Insert</td>			Wheel Driver Assy., Auto-Insert
5010-13363-00R121Resistor, 100 Ω, 1/8w, 5%5010-13844-00R43, R44, R48, R49, R52Resistor, 100K Ω, 1/8w, 5% R49, R525010-13593-00R30, R33, R34, R36-R39, R46, R51, R55 R59, R63-R66, R115Resistor, 10K Ω, 1/8w, 5% R59, R63-R66, R1155010-09134-00R42Resistor, 150K Ω, 1/4w, 5% S010-13594-005010-0931-00R31, R35Resistor, 150K Ω, 1/4w, 5% S010-13372-005010-13372-00R19Resistor, 220 Ω, 1/8w, 5%5010-13369-00R67-R74Resistor, 220 Ω, 1/8w, 5%5010-13596-00R45, R50, R54, R58, R62Resistor, 33 K Ω, 1/8w, 5% R76-R83, R85-R92, R1225010-13364-00R114Resistor, 330 Ω, 1/8w, 5% R27, R1195010-13365-00R21, R24, R25, R27, R119Resistor, 75KΩ, 1/8w, 5% S200mm	5010-14093-00		Resistor, 0 Ω , 1/8w, 5%
5010-13844-00R43, R44, R48, R49, R52Resistor, 100K Ω, 1/8w, 5% R49, R525010-13593-00R30, R33, R34, R36-R39, R46, R51, R55 R59, R63-R66, R115Resistor, 10K Ω, 1/8w, 5% R59, R63-R66, R1155010-09134-00R42Resistor, 150K Ω, 1/4w, 5% S010-13594-005010-08931-00R31, R35Resistor, 1K Ω, 1/8w, 5% S010-13372-005010-09999-00R67-R74Resistor, 220 Ω, 1/8w, 5% S010-13596-005010-13364-00R45, R50, R54, R58, R62Resistor, 33 Ω, 1/8w, 5% R76-R83, R85-R92, R1225010-13371-00R114Resistor, 330 Ω, 1/8w, 5% R27, R1195010-13365-00R41Resistor, 75KΩ, 1/8w, 5% F31-14094-005010-14065-00R41Resistor, 75KΩ, 1/8w, 5% Fuse, 4ASB, 5x20mm	5010-13363-00		Resistor, 100 Ω, 1/8w, 5%
R49, R525010-13593-00R30, R33, R34,Resistor, 10K Ω, 1/8w, 5%R36-R39, R46, R51, R55R59, R63-R66, R1155010-09134-00R42Resistor, 150K Ω, 1/4w, 5%5010-13594-00R26Resistor, 1K Ω, 1/8w, 5%5010-08931-00R31, R35Resistor, 1K Ω, 1/2w, 5%5010-13372-00R19Resistor, 220 Ω, 1/8w, 5%5010-13372-00R45, R50, R54,Resistor, 21K Ω, 1/4w, 5%5010-13596-00R45, R50, R54,Resistor, 33K Ω, 1/8w, 5%6010-13364-00R1-R16,Resistor, 33 Ω, 1/8w, 5%5010-13371-00R114Resistor, 330 Ω, 1/8w, 5%5010-13365-00R21, R24, R25,Resistor, 4.7K Ω, 1/8w, 5%5010-14065-00R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00F1, F2Fuse, 4ASB, 5x20mm		R43, R44, R48,	Resistor, 100K Ω, 1/8w, 5%
5010-13593-00R30, R33, R34, R36-R39, R46, R51, R55 R59, R63-R66, R115Resistor, 10K Ω , 1/8w, 5% R59, R63-R66, R1155010-09134-00R42Resistor, 150K Ω , 1/4w, 5% 5010-13594-005010-08931-00R31, R35Resistor, 1K Ω , 1/8w, 5% 5010-13372-005010-13372-00R19Resistor, 220 Ω , 1/8w, 5% 5010-09999-005010-13596-00R45, R50, R54, R45, R50, R54, R58, R62Resistor, 33 K Ω , 1/8w, 5% R76-R83, R85-R92, R1225010-13371-00R114Resistor, 330 Ω , 1/8w, 5% R27, R1195010-13365-00R41Resistor, 75K Ω , 1/8w, 5% F31-14094-005010-14065-00R41Resistor, 75K Ω , 1/8w, 5% FURE, 4ASB, 5x20mm	0010100100		
5010-09134-00R42Resistor, 150K Ω, 1/4w, 5%5010-13594-00R26Resistor, 1K Ω, 1/8w, 5%5010-08931-00R31, R35Resistor, 1K Ω, 1/2w, 5%5010-13372-00R19Resistor, 220 Ω, 1/8w, 5%5010-09999-00R67-R74Resistor, 2K Ω, 1/4w, 5%5010-13596-00R45, R50, R54,Resistor, 33K Ω, 1/8w, 5%5010-13364-00R1-R16,Resistor, 33 Ω, 1/8w, 5%5010-13371-00R114Resistor, 330 Ω, 1/8w, 5%5010-13365-00R21, R24, R25,Resistor, 4.7K Ω, 1/8w, 5%5010-13465-00R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00F1, F2Fuse, 4ASB, 5x20mm	5010-13593-00	R30, R33, R34 R36-R39, R46,	R51, R55
5010-13594-00R26Resistor, 1K Ω, 1/8w, 5%5010-08931-00R31, R35Resistor, 1K Ω, 1/2w, 5%5010-13372-00R19Resistor, 220 Ω, 1/8w, 5%5010-13372-00R45, R50, R54,Resistor, 2K Ω, 1/4w, 5%5010-13596-00R45, R50, R54,Resistor, 33K Ω, 1/8w, 5%5010-13364-00R1-R16,Resistor, 33 Ω, 1/8w, 5%5010-13371-00R114Resistor, 330 Ω, 1/8w, 5%5010-13365-00R21, R24, R25,Resistor, 4.7K Ω, 1/8w, 5%5010-14065-00R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00F1, F2Fuse, 4ASB, 5x20mm			H115
5010-06931-00R31, R35Resistor, 1K Ω, 1/2w, 5%5010-03372-00R19Resistor, 220 Ω, 1/8w, 5%5010-13372-00R67-R74Resistor, 2K Ω, 1/4w, 5%5010-13596-00R45, R50, R54,Resistor, 33K Ω, 1/8w, 5%5010-13364-00R1-R16,Resistor, 33 Ω, 1/8w, 5%5010-13371-00R114Resistor, 330 Ω, 1/8w, 5%5010-13365-00R21, R24, R25,Resistor, 4.7K Ω, 1/8w, 5%5010-14065-00R41Resistor, 75KΩ, 1/8w, 5%5010-14065-00F1, F2Fuse, 4ASB, 5x20mm	5010-09134-00		
5010-13372-00 R19 Resistor, 220 Ω, 1/8w, 5% 5010-09999-00 R67-R74 Resistor, 2K Ω, 1/4w, 5% 5010-13596-00 R45, R50, R54, Resistor, 33K Ω, 1/8w, 5% 5010-13364-00 R1-R16, Resistor, 33 Ω, 1/8w, 5% 5010-13371-00 R114 Resistor, 330 Ω, 1/8w, 5% 5010-13365-00 R21, R24, R25, Resistor, 4.7K Ω, 1/8w, 5% 5010-14065-00 R41 Resistor, 75KΩ, 1/8w, 5% 5731-14094-00 F1, F2 Fuse, 4ASB, 5x20mm	5010-13594-00	R26	
5010-09999-00R67-R74Resistor, 2K Ω, 1/4w, 5%5010-13596-00R45, R50, R54,Resistor, 33K Ω, 1/8w, 5%5010-13364-00R1-R16,Resistor, 33 Ω, 1/8w, 5%5010-13371-00R114Resistor, 330 Ω, 1/8w, 5%5010-13365-00R21, R24, R25,Resistor, 4.7K Ω, 1/8w, 5%5010-14065-00R41Resistor, 75KΩ, 1/8w, 5%5731-14094-00F1, F2Fuse, 4ASB, 5x20mm	5010-08931-00	R31, R35	
5010-09999-00R67-R74Resistor, 2K Ω, 1/4w, 5%5010-13596-00R45, R50, R54,Resistor, 33K Ω, 1/8w, 5%R58, R62S010-13364-00R1-R16,Resistor, 33 Ω, 1/8w, 5%5010-13371-00R114Resistor, 330 Ω, 1/8w, 5%5010-13365-00R21, R24, R25,Resistor, 4.7K Ω, 1/8w, 5%S010-14065-00R41Resistor, 75KΩ, 1/8w, 5%5731-14094-00F1, F2Fuse, 4ASB, 5x20mm	5010-13372-00	R19	
R58, R62 5010-13364-00 R1-R16, Resistor, 33 Ω, 1/8w, 5% R76-R83, R85-R92, R122 R76-R83, R85-R92, R122 5010-13371-00 R114 Resistor, 330 Ω, 1/8w, 5% 5010-13365-00 R21, R24, R25, Resistor, 4.7K Ω, 1/8w, 5% 5010-14065-00 R41 Resistor, 75KΩ, 1/8w, 5% 5731-14094-00 F1, F2 Fuse, 4ASB, 5x20mm			Resistor, 2K Ω, 1/4w, 5%
Softo 1805100 R76-R83, R85-R92, R122 5010-13371-00 R114 Resistor, 330 Ω, 1/8w, 5% 5010-13365-00 R21, R24, R25, Resistor, 4.7K Ω, 1/8w, 5% S010-14065-00 R41 Resistor, 75KΩ, 1/8w, 5% 5731-14094-00 F1, F2 Fuse, 4ASB, 5x20mm	5010-13596-00		, Resistor, 33K Ω, 1/8w, 5%
5010-13371-00 R114 Resistor, 330 Ω, 1/8w, 5% 5010-13365-00 R21, R24, R25, R27, R119 Resistor, 4.7K Ω, 1/8w, 5% 5010-14065-00 R41 Resistor, 75KΩ, 1/8w, 5% 5731-14094-00 F1, F2 Fuse, 4ASB, 5x20mm	5010-13364-00		
5010-13365-00 R21, R24, R25, R27, R119 Resistor, 4.7K Ω, 1/8w, 5% 5010-14065-00 R41 Resistor, 75KΩ, 1/8w, 5% 5731-14094-00 F1, F2 Fuse, 4ASB, 5x20mm	5010-13371-00		
5010-14065-00 R41 Resistor, 75KΩ, 1/8w, 5% 5731-14094-00 F1, F2 Fuse, 4ASB, 5x20mm		R21, R24, R25	
5731-14094-00 F1, F2 Fuse, 4ASB, 5x20mm	5010-14065-00		Resistor, 75KΩ, 1/8w, 5%

5043-08980-00	B1-B4, B10-B19,	Capacitor, 01µF,50v(+80,-20%)
	B7-B9, C31, C8,	
5043-08996-00	C27, C29, C32,	Capacitor, .1µF, 50v,(±20%)Ax.
	C35-C37	
5048-12577-00	C28	Capacitor, .47µF, 50v, Axial
5048-13375-00	C10-C25	Capacitor, 100PF, 50v, 10% Ax.
5048-11031-00	C1, C2, C39	Capacitor, .001µF,50v,10% Ax.
5040-09343-00	C30, C33	Cap. Electrolytic, 10µF, 20v
5070-08919-00	D1	Diode, 1N4148
5075-09135-00	D4	Zener Diode, 10v, 1N4740A
5075-12824-00	D7, D8	Zener Diode, 12v, 1N4742A
5075-14066-00	D2, D3	Zener Diode, 15v, 1N4744A

Description

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A-18004-40033 Wheel Driver Board Assembly

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A-18005.1-Al Wheel Driver Assembly, Auto -Insert

2-5

Description	Xtal Oscillator, 40mHz Xtal Oscillator, 50mHz Y10H 10mHz	Light Emitting Diode, Red FB700 Bridge 4A Fuse Holder		I.C. Socket, 32-pin, .6" Battery Holder DIP Switch, 16-Pin	Switch PCB Mount MC Connector, C156x2 2-pin	Connector, C100x5 5-pin	Connector, C155X/ /-pin Connector, C100x12 12-pin	Connector, C100x13 13-pin Connector, 20-pin Ribbon, .1"	Connector, 26-pin Ribbon , .1" Heatsink 5299B Header	Mach. Screw, 4-40 x 3/8" Nut 4-40 KEPS	CPU Surface Mount Sub-Assembly	Cap., 0805_22PF, 10%, 50v Cap., 0805_47PF_10%_50v	C212,	.772	03 37-C239, 73,	Cap., 0805PF, 5%, 50v Cap., 0805, 470PF, 20%, 50v Cap., 0805, 680PF, 5%, 50v Cap., 0805, 1000PF, 5%, 50v	Cap., 0805, 3900PF, 5%, 50v Cap., 0805, 4700PF, 5%, 50v Cap., 0805, 0.01MF, 10%, 50v	221-C31, 32, C54, 67, C69, 30, C83,
Designator	U89 U1	D5-D7 L35-L37 BR1 F1, F2	U38, U43, U52, U54, U111, U114 U2, U30	uz-uza B1 U97, SW3	SW1 P1, P2 P5	P3, P7	5d	P8	HS1, HS2 J6			C173, C174 C88, C118, C159,	C160, C164, C197, C198, C224-C226, C229-C234	C255, C274, C275, C277,	0219, 0219, 0239-0303 C115, C151-C153, C235-C239, C155-C157, C235, C237-C239, C241, C242, C256-C273, C280-C297	C123, C190 C169 C95, C98, C111, C128 C94, C96, C99, C110,	C127, C228, C232 C97, C100, C129 C109 C1-C8, C10, C11,	C13- C16, C18, C19, C21-C31, C33-C41, C43-C48, C52, C54, C55, C57-C64, C66, C67, C69, C70, C72-C75, C77-C80, C83,
Part Number	5521-13806-05 5521-13603-01 520-13301-00	5671-13732-00 5556-14181-00 5100-13945-02 5733-14113-00	5700-12047-00 5700-12088-00	5645-09025-00 5645-09025-00	5641-12551-00 5791-10862-02 5791-12461-04	5791-12461-05 5791-10862-07	5791-12461-12 5701-19461-12	5791-09437-00 5791-09437-00	5705-12638-00 5705-12638-00 5791-12994-00	4004-01005-06 4404-01124-00	A-19331	5052-14149-00 5052-14366-00			5052-14169-00	5052-14367-00 5052-14167-00 5052-14171-00 5052-14166-00	5052-14168-00 5052-14350-00 5052-14164-00	
Description	CPU Sub-Assembly Capelectro, 10,000MF, 35v ULN2064-Quad High Current	Darlington Switch Diode, 1N4004 TL084 TL084	2K x 8 SHAM 62256, 32Kx8 BIT SHAM, 55nS 8Kx8 CMOS SRAM 120nS	ADC0844-8 BIT A TO D	Converter w/4 CH. Multiplexer AM26LS31 - Quad Differential Line Drivers	AM26LS32 - Quad Differential Line Receivers	IDT7204, CMOS Parallel FIFO 4K × 9 BIT 200S	MATCHDOCMOS CTI Circuit	74F00 74S02 - ALS TTL Quad 2	Input NOR GATE 7407-TTL Hex Buffer w/ High	Voltage Output	74LS32	74LS74 74HC138	74ALS138-ALS TTL 3/8 Decoder 74HC174	74176B-Bidirectional Transceiver 74ALS245, ALS TTL Octal Bus Transceiver	74HC541 - HC TTL Octal Buffer	74ALS541 - ALS TTL Octal Buffer 74ALS574 - ALS TTL Octal	rip-riop 75160 - Octal Interface Bus Trans. LM79L05T LM78L05T Xtal Oscillator, 33mHz
Designator	C191, C192 U122	D1-D4 U78, U81 U79, U80	u35, u41, u42 U85, U87 U31	U61 U130	U92	U91	U45, U58	U30	U62 U55	U82	1163	U36	U04 U34	U88 U40, U51	U126-U129 U44, U46, U48, U49, U98, U107, U108, U113	U33, U39, U50, U93, U104, U105, U109, U112, U116, U119, U120, U121, U125	U32, U47, U65, U66, U86, U110 U37, U53,	U117, U124 U1085 U1010 U67
Part Number	A-19234 5040-13417-00 5370-12602-00	5070-09054-00 5370-13419-00 5370-12730-00 5340-13204 00	5340-13597-00 5340-13597-00 5340-12558-00	5371-13299-00 5372-12901-00	5340-12958-00	5340-12959-00	5344-14130-00	5434-12255-00	5283-10551-00 5286-14178-00	5280-09309-00	5311-12538-00	5281-09500-00 5281-09500-00	5311-10948-00	5317-12023-00 5311-12043-00	5317-12208-00 5317-12208-00	00-78221-1156	5317-12211-00 5317-12212-00	5430-13598-00 5250-13303-00 5250-13302-00 5521-13806-06

A-19233-40033 CPU/Sound Board Assembly

	CPU/Sound Board Assembly (Continued)								
Description	B5, R437- Resistor, 0805 33 Ω , 1/10w, 5% 91, R493, R494, 52, R527, R527, 52, R567-R586, 51, R567-R586, 201, R594, R696, 2010, 10700, 10700	06, R738, R740, 48, R751, R753	'62, R764, R533 '62, R764, R533 Resistor, 0805 47 Ω, 1/10w, 5%	Resistor, 0805 47 Ω, 1/10w, 5% , R218, 56, R358, :23, R482,	Resistor, 0805 100 Ω, 1/10w, 5% 41, R427,	Resistor, 0805 120 Ω, 1/10w, 5% Besister 0805 220 Ω 1/10w, 5%		16815101, U&UJ 4/U 12, 1/1UW, 5%	10, H/12, 18, H720 Resistor, 0805 680 Ω, 1/10w, 5% Resistor, 0805 1K Ω, 1/10w, 5% Resistor, 0805 1K Ω, 1/10w, 1% 08, R640, Resistor, 0805 3.32K Ω, 1/10w, 5% Resistor, 0805 4.7K Ω, 1/10w, 5% Resistor, 0805 4.7K Ω, 1/10w, 5% 65, R88, R91, R109, R151, 64, R165, 79, R194, 10, R213, 21, R224, 52, R259,
Designator	R414, R425, R426, R435, R437- R467, R429-R432, R434, R435, R437- R467, R472, R484-R487, R491, R493, R494, R497, R499, R501, R508-R524, R527, R528, R532, R537-R552, R567-R586, R52, R537, R698, R591, R994, R696, D507, D500, D770, D770, D770, D770,	R726-R732, R734, R736, R738, R740, R726-R732, R734, R736, R738, R740, R742 R744 R746 R748 R751 R753	R754, R756, R759, R762, R764, R533 R26, R28, R30, R32, R32, Resist	R34, R43-R49, R78-R87, R148, R215, R218, R219, R342, R344-R356, R358, R369, R422, R422, R423, R482,	H483, H554, H556 R25, R77, R123, R150, R178, R217, R341, R427, D426, D601, D600, D647	R737, R739, R743, R749 B468	R343, R610, R650	R489, N026, N020, R641, R651, R634, R635, R639, R641, R651, R654, R656, R658, R659, R662, R663, R666, R667, R670, R673, R674, R677, R678, R680, R673, R674, R677, R678, R680, R681, R674, R677, R678, R680, R681, R681, R681, R681, R681, R681, R681, R681, R681, R681, R681, R681, R681, R681, R681, R681, R681, R681, R681,	H685, H686, H7/09, H7/10, H7/12, R713, R716, R716, R718, R720 R504, R560, R565 R473, R560, R565 R475, R505, R561, R506, R557, R562, R506, R557, R562, R607, R608, R640, R643 R502, R558, R563 R10, R27, R58, R563 R10, R176, R179, R194, R165, R169, R170, R176, R179, R194, R169, R170, R170, R164, R165, R169, R170, R176, R179, R194, R165, R169, R170, R170, R170, R164, R165, R169, R170, R170, R170, R165, R170, R164, R165, R169, R170, R170, R170, R170, R165, R170, R164, R165, R169, R170, R170, R170, R170, R165, R170, R164, R165, R169, R170, R170, R170, R170, R165, R170, R164, R165, R160, R170, R170, R170, R170, R165, R170, R164, R165, R170, R170, R170, R170, R170, R165, R170, R164, R165, R170, R170, R170, R170, R164, R165, R170, R170, R170, R170, R164, R165, R170, R170, R170, R170, R165, R170, R164, R165, R200, R201, R221, R224, R220, R224, R220, R224, R252, R259, R259, R250, R25
Part Number	5020-14373-00		5020-14161-00	5020-14161-00	5020-14152-00	5020-14374-00 5020-14375-00	5020-14160-00 5020-14160-00 5020-14175 00	00-0/04-0000	5020-14377-00 5020-14379-00 5020-14379-00 5020-14380-00 5020-14155-00 5020-14172-00 5020-14172-00
Designator	C85, C87, C90, C101, C102, Cap., 0805, 0.01MF, 10%, 50v C104, C105, C107, C116, C117, C120, C131, C132, C135-C138, C140, C142-C144, C150, C162, C163, C166, C175, C178-C187, C193-C196, C199-C209, C213-C218, C231-C232, C234-C254, C246, C306,	C56, C71, C84, C89, C103, C11, C84, C89, C103, C119, C165, C2719	C148 C145-C147 Cap., 0805 0.047MF, 10%, 50v	CZU, C51, C53, C65, Cap., 0805 0.1MF, 20%, 50V C65, C81, C82, C91, C93, C106, C112-C114, C129, C125, C133, C139, C141, C149,	C108, C118, C110, C211, C211, C211, C214, C204, C108, C168, C168, C168, C109, C1130, C1032, C240, 1206, 0.33MF, ±20%, 50v C1199, C1130, C1032, C240, 1206, 0.33MF, ±20%, 50v C126, C171, C172, C240, 1MF ± 20%, 35v TANT	C189 C9, C12, C17, C32, Cap., 10MF, ±20%, 16∨ TANT C42, C68, C86, C92, C134, C154,	C158, C161, C177, C220, C227, C20, C243, C253, C276, C278, C304	C122, C188 Cap., 22MF, ±20%, 16v R2, R3, R6, R7, R9, Resistor, 0 Ω, 1/10w R11, R16, R18, R19, R21, R23, R24, R97, R192, R193, R238, R251, R372, R761	R337, R553Resistor, 15 Ω, 1/10w, 5%R12-R14, R35-R42,Resistor, 0805 33 Ω, 1/10w, 5%R60, R61, R63, R64, R66-R76,Resistor, 0805 33 Ω, 1/10w, 5%R99-R104, R107, R110, R11,R112, R114-R122, R125-R157-R159,R112, R114-R122, R124-R147,R114, R122, R124-R147,R119, R153, R155, R157-R159,R112, R114-R122, R125-R157, R159,R161-R168, R172-R125, R127-R159,R161-R168, R172-R105, R106, R208,R107-R200, R205, R206, R208,R208,R209, R211, R212, R224, R233,R233, R235, R239, R231-R225, R226, R228, R229, R231-R233, R235, R239, R231-R233,R226, R228, R229, R231-R233, R235, R325, R329,R201, R304, R306-R310, R312,R301, R333, R335, R355, R357,R301, R304, R305, R306-R307, R375, R380-R301, R304, R307, R375, R380-R368, R370, R373-R375, R380-
Part Number	5052-14164-00	5052-14435-00	5052-14385-00 5052-14369-00	00-69141-5606	5051-14150-00 5052-13633-00 5051-14371-00	5051-14151-000		5051-14148-00 5020-14349-00	5020-14372-00 5020-14373-00
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A-19233-40033

A-19233-40033 CPU/Sound Board Assembly (Continued)

Part Number	Designator	Description
5020-14172-00	R280, R281, R283, R300, R30, R303, R305, R311, R313, R33, R336, R376, R377-R379, R416 R421, R468, R469, R471, R480 R481, R490, R492, R495, R490 R498, R500, R502, R525, R520 R529-R531, R534, R555, R587 R594, R606, R611-R618, R622 R629, R631, R633, R636, R630 R642, R644-R646, R652, R653 R642, R644-R646, R652, R653 R655, R657, R660, R661, R664 R665, R668, R669, R671, R672 R675, R676, R679, R682-R684	4, 5, 6, 6, 8, 8, 8, 4, 2,
5020-14172-00	R687, R689, R690, R692, R693 R695, R698, R701, R704, R706-R708, R711, R714 R717, R719, R721, R722, R755 R757, R758, R760, R470	Resistor, 0805 4.7K Ω, 1/10w, 5%
5020-14173-00	R288, R289, R290-R294, R338-R340, R419	Resistor, 0805 6.19K Ω, 1/10w, 1%
5020-14158-00	R477, R478, R559, R564, R625	Resistor, 0805 8.2K Ω, 1/10w, 5%
5020-14383-00	R476	Resistor, 0805 9.09K Ω, 1/10w, 1%
5020-14156-00	R648, R649, R723- R725, R733, R735, R741, R745 R747, R750, R752	Resistor, 0805 10K Ω, 1/10w, 5%
5020-14384-00	R474	Resistor, 0805 11K Ω, 1/10w, 1%
5020-14381-00	R416, R417, R479, R535, R596, R597	Resistor, 0805 22K Ω, 1/10w, 5%
5020-14174-00	R418, R536	Resistor, 0805 47K Ω, 1/10w, 5%
5349-14131-00	U94, U95, U101, U102	256K x 8 BIT VRAM, 70nS
5349-13599-00	U69-U76	44C1000, 1Megx4BIT CMOSDynamic RAM, 60nS
5349-14132-00	U56, U57, U59, U60	6226X, 128Kx8BIT Fast Static RAM 20nS
5400-13298-00	U1	ADSP2105
5410-13465-00	U68	IC, VR1 ASIC
5285-14342-00	U83, U84	74ALS374 20PSOL
5400-14129-00	U90	DSP TMS320C31, 50MHZ
5556-14348-00	L1-L34, L38, L39, R765	Inductor, FB0805
5020-14347-00	R286, R424, R433	Resistor, 0805, 4.75K Ω, 1/10w, 1%

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A-19233-40033 CPU/Sound Board Assembly

A-19234 CPU Sub-Assembly



A-19233-40033 CPU/Sound Board Assembly

A-19331 CPU Surface Mount Sub-Assembly

A-19271 Dash Assembly



ltem	Part Number	Description
1.	A-19502	Dash Plate
2.	A-19503	Steering Mech. Mtg. Plate
З.	03-7655-8	Clamp Cable, 1/2"
4.	20-10117	4-Speed Shifter
5.	20-10127-1	Switch P/B Rectangular, Red
6.	20-10127-2	Switch P/B Rectangular, White
7.	20-10127-3	Switch P/B Rectangular, Blue
8.	20-10129-1	Switch P/B Circular Med, Start
9.	20-10129-2	Switch P/B Circular Med, Radio
10.	20-10134	Steering Wheel Assembly
11.	5555-12924-00	Speaker, 4, Tweeter 15w
12.	5555-12856-00	Speaker, 5-1/4", 4, 25w
13.	H-18175	Control Cable
14.	H-18737	Four Speed Shift Cable
15.	4020-01100-20	TR, 1/4-20 x 1-1/4"
16.	4420-01119-00	Nut, 1/4-20 ESN/NE
17.	4310-01123-10B	Bolt, 10-24 x 5/8 CB
18.	4410-01128-00	Nut, 10-24 KEPS
19.	4408-01128-00	Nut, 8-32 KEPS
20.	4320-01124-12	Bolt, 1/4-20 x 3/4"



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	A-1928	38
Monitor	Cover	Assembly

ltem	Part Number	Descript
1.	03-9099	Monitor C
2.	01-13419	Shield M
3.	07-6700	Pop Rive
4.	4700-00096-00	Flatwash

tion

Cover Monitor Cover vet, 1/8" Dia. her, 1/8x5/16x21ga.

CRUIS'N USA

SECTION

THREE

Schematics and Wiring Diagrams

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3-2	

NOTES

JAMMA CHART

FUNCTION	WIRE COLOR	PIN	PIN	WIRE COLOR	FUNCTION
Ground	Black	1	A	Black	Ground
Ground	Black	2	В	Black	Ground
+5VDC	Red	3	С	Red	+5VDC
+5VDC	Red	4	D	Red	+5VDC
-5VDC	Yellow	5	E	Yellow	-5VDC
+12VDC	Orange	6	F	Orange	+12VDC
	Key	7	Н	Key	
Coin Counter 1	Brown	8	J	Brown-Red	Coin Counter 2
	N/C	9	K	N/C	
	N/C	10	L	N/C	
	N/C	11	M	N/C	
Video Red	Red	12	N	Green	Video Green
Video Blue	Brown	13	Р	White	Video Sync
Video Ground	Shield	14	R	White-Gray	Service
Test	Black-Blue	15	S	Black-Green	Slam
Coin 1	Black-Brown	16	Т	Black-Red	Coin 2
Start	White	17	U	N/C	
Black	White-Black	18	V	N/C	
Black	White-Brown	19	W	N/C	
Black	White-Red	20	X	N/C	
	N/C	21	Υ	N/C	
Black	White-Yellow	22	Z	N/C	
Black	White-Green	23	а	N/C	
Black	White-Blue	24	b	N/C	
Black	White-Violet	25	с	N/C	
	N/C	26	d	N/C	
	N/C	27	е	Black	Ground
Ground	Black	28	f	Black	Ground

POWER WIRING DIAGRAM



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CABINET WIRING DIAGRAM



 $\Delta X_{\rm eff}$, where $\Delta X_{\rm eff}$ is the state of the

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