# FRQUENTLY ASKED QUESTIONS ABOUT DYNAMO COIN AND PRO-STYLE HOCKEY

**BEFORE YOU START:** Your best resources for Dynamo Air Hockey are the CURRENT and PREVIOUS-GENERATION Air Hockey Parts Breakdowns. Located on this site, both are PACKED with useful information. Note that the IDENTIFIERS on the exploded drawing could refer to several different PART NUMBERS. There is no such part as an "H3". Never was. Don't look for an "H3" in the Webstore, don't ask for the price of an "H3", nobody needs an "H3". Save time: get the part number.

**BEFORE YOU CALL**: To solve any functional or wiring questions, open the SERVICE DOOR on the side of your table and check to see the VERSION (v#.##) printed on the Controller PC Board (usually near the rim). We assure you, this will be either the very first question Tech Support will ask you or darn close, so be prepared.

A WORD ON PARTS AVAILABILITY: The basic coin-operated and "Pro Style" professional grade products have changed little over the past 35 years. Most major changes have been cosmetic. While a part or decal may no longer be available in a particular color or pattern, there is a current part that should fit, perhaps with a little customization or effort but that's to be expected on an older table. On a standard 8-foot or 7-foot table, you should be able to find legs, corners, playfields, goals, playfield trim, overhead brackets, corner covers & decals that may not match, but fit.

## Parts NO LONGER available with NO replacement are...

Any part specific to Four-Player Tables

Any part specific to small 6-foot Tables including the Mini Splash and small Hot Flash models (Short Shot is not 6-foot)

The brass-finish parts for the Top Brass Hockey

**Top Rails without Rounded Corners** 

All parts for "Dual Tube" overheads

**Arena** Overhead parts (other than the LED Scoreboard)

Parts for Tornado Branded Coin-operated tables

Parts are competitively priced if you need an item or two to get a table working. The cost adds up quickly for a table that needs "a complete restoration" or was "the table picked from to repair all the others". Dynamo takes pride in a durable table for which many parts are still available, but sometimes almost always a new Dynamo with updated features is a better investment than sinking hundreds of dollars into a 10 or 20 or even 30-year-old table.



#### HOW OLD IS MY TABLE?

#### WHAT TABLE DO I HAVE?

- DOES IT HELP THAT TO KNOW MY TABLE IS A "DH-100"?
- I KNOW MY MODEL NUMBER, DOES THAT HELP?
- WHAT TABLE LOOKS LIKE THIS ONE AND SAYS "VALLEY-DYNAMO" ON THE PLAYFIELD?
- CAN I STILL GET ARCTIC STAR PARTS?
- IS MY TABLE A HOT FLASH OR HOT FLASH II HOW CAN I TELL?
- I HAVE A TORNADO AIR HOCKEY TABLE: CAN I STILL GET PARTS?
- CAN I GET KEYS FOR MY TABLE?
- WHAT'S THE CFM RATING ON YOUR BLOWER MOTORS?
- WHY DO I NEED A BLOWER MOTOR GASKET?

#### **PUCKS AND MALLETS**

- MY PLAYFIELD IS CLEAN, BUT THE GAME PLAY IS STILL SLOW.
- WHAT MAKES DYNAMO PUCKS AND MALLETS SPECIAL?
- WHAT'S THE DIFFERENCE BETWEEN FLUORESCENT AND WHITE PUCKS?
- ARE MY MALLETS CRACKED?
- MY MALLETS HAVE NO FELT PADS FOR THE BOTTOM, CAN I ORDER THEM FROM YOU?

#### **PLAYFIELDS**

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- CAN I PURCHASE A REPLACEMENT FOR MY DAMAGED PLAYFIELD?
- CAN I CUT DOWN AN 8 FOOT PLAYFIELD FOR A 6 FOOT COIN OP AIR HOCKEY?
- WHY NOT USE STAINLESS STEEL OR POLYCARBONATE PLAYFIELDS?
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- CAN I GET A POWER CORD FOR MY TABLE?
- CAN I GET ELECTRONIC PARTS FOR THE BLACK HOLE TABLE
- WHAT TO DO? MY COIN TABLE IS PLUGGED IN AND WON'T START.
- WHAT DOES THIS TROUBLE CODE MEAN?
- WHY DOES MY TABLE SHUT DOWN AUTOMATICALLY?
- o DO YOU REPAIR FAILED BOARDS?
- WHAT BOARD DO I HAVE?
- O DO YOU SUPPLY THE ELECTRICAL COMPONENTS ON THE BOARDS?
- CAN I ADD A BILL ACCEPTOR TO MY TABLE?
- HOW CAN I CHANGE MY OLD TABLE TO THE "CHEAT PROOF" MAGNETIC COIN SWITCH?
- CAN I ADD COIN OPERATION TO MY NON-COIN TABLE?



- O CAN I PURCHASE A HARDWARE KIT WITH ALL THE FASTENERS PREPACKAGED?
- O HOW DO I TOUCH UP THE FLUORESCENT YELLOW TRIM PIECES ON MY HOT FLASH II AIR HOCKEY?
- THE SIDE AND END DECALS ON MY AIR HOCKEY TABLE ARE WORN, WHAT REPLACEMENTS ARE AVAILABLE?
- CAN I BUY SOME OF THOSE NIFTY NEW HOT FLASH DECALS FOR MY OLD HOT FLASH?
- O HOW DO I GET THE NEWER CORNER PROTECTORS TO FIT ON MY OLDER DYNAMO TABLE?

#### **LIGHT BULBS AND LIGHTING**

- WHY DON'T YOU SELL LIGHT BULBS
- WHERE CAN I FIND BLACKLIGHT BULBS FOR MY HOT FLASH OVERHEAD?
- WHAT LIGHT BULBS GO IN THE BLUE STREAK/PRO STYLE OVERHEAD?
- o <u>DO YOU SELL A KIT TO CONVERT AN OVERHEAD FROM FLUORESCENT BULBS TO LED LIGHTING</u>?
- O WHAT LIGHT BULBS GO IN THE ARENA OVERHEAD?
- WHAT LIGHT BULBS GO IN THE EMERGENCY BEACONS ON THE ARENA OVERHEAD?
- o CAN I PURCHASE BALLASTS FOR MY OVERHEAD LIGHTING UNIT?
- o CAN I PURCHASE LAMP SOCKETS FOR MY 8-FOOT OVERHEAD?
- O CAN I GET PARTS FOR THE HELICOPTER-STYLE LIGHT ON MY ARENA AIR HOCKEY?
- O HOW CAN I MOVE MY TABLE, AND SHOULD I DISASSEMBLE IT?

#### **GOAL ENDS**

- I REPLACED A GOAL END AND SCORES NO LONGER REGISTER. WHAT HAPPENED?
- o <u>New Quick entry goal ends have only one bolt hole, mine have two</u>
- o WHAT'S A GOAL END SECOND?
- o MY GOAL END DOES NOT WANT TO OPEN, ARE YOU SURE IT USES A J8045 KEY?

**HOW OLD IS MY TABLE?** Dynamo Air Hockey table serial numbers were meticulously tracked in an ancient IBM-AS/400 style mainframe computer system we long ago lost the ability to access. As tables have been modified and updated through the years, the version of PCB in your table, coin mechanism, scoring mechanism or even the cosmetic appearance will not reveal the age. Your table may have a v7.0 PCB and a magnetic coin switch, but those may not have been original equipment.

"This axe is 30 years old. I replaced the handle 10 years ago and the blade 7 years ago."



If your table has mechanical scoring switches in the goals, it was probably built before 1993.

If your table uses a push chute coin system, it was probably built before 2005 (although we still make Push Chute tables occasionally to order)

#### MY AIR HOCKEY TABLE IS A "MODEL DH-100," DOES THAT HELP? No.

Technically, for certification purposes, any Dynamo product that floats a puck on air, whether they are home model, professional-grade home tables, or coin operated, built yesterday, last year, or 30 years ago is a model DH-100. What's important to know when looking for any parts are if the table is or is not coin operated, and if any Model Name (NOT NUMBER) is shown or known. Again, the Parts Breakdown links at the top of this page are your most valuable resource.

"MY AIR HOCKEY TABLE IS A MODEL 02040\_\_\_\_, DOES THAT HELP?" We do not have historical records of model numbers and years built. Remember that ancient mainframe computer we mentioned that had the Serial Numbers?



"MY AIR HOCKEY TABLE LOOKS LIKE THIS ONE AND SAYS "VALLEY-DYNAMO" ON THE PLAYFIELD,

**DOES THAT HELP?"** Note the distinct, squared-off corners. This table was built nearly 30 years ago in a brief cooperative deal with Sam's Club. Some parts are shared with the ProStyle, but many are unique and no longer available. Contact Tech support to inquire about specific items and keep your expectations low.

# ARE THERE ANY PARTS AVAILABLE FOR THE OLD ARCTIC STAR HOME TABLE?:

The overseas manufacturer who built that table ceased all contact with us when Brunswick sold Valley-Dynamo years ago in 2009, and we could no longer obtain any parts. Soon after, Brunswick started marketing a remarkably familiar-looking table called the V-Force, but that table has since reverted to non-electronic scoring. Then, GLD Products sold another very familiar-looking table called



the Viper Arctic Ice – this one even has a big star on the playfield like the Arctic Star did, but that's since been discontinued. Are the parts compatible? We're not sure; GLD said they were. Fourteen years later the manufacturer still isn't answering our calls or e-mails.





# MY HOCKEY TABLE LOOKS LIKE THIS ONE, CAN I GET PARTS? The Arctic Flash has some commonality with the Arctic Wind, but the exterior and fluorescent powder-coated parts are no longer available.

#### The DYNAMO HOT FLASH - a visual history:



I HAVE A TORNADO AIR HOCKEY TABLE. CAN I STILL GET PARTS? Before Valley and Dynamo merged, a Tornado-branded Air Hockey was sold. Because Valley and Dynamo were competitors at the time, no effort was made to use competitor Dynamo's parts in the Tornado table. Due to this near-total lack of cross-compatibility and common parts, the line was discontinued at the time of the merge over 25 years ago.

A Dynamo Blower Motor can *probably* be adapted to work in a Tornado Air Hockey table, but we have no "official procedure" for it. You'll need to rely on your knowledge and creativity as one must sometimes do repairing a product which has been discontinued over 25 years with parts from another manufacturer's product. No other parts are available.

#### CAN I GET KEYS FOR MY TABLE? Let's discuss:

- COIN DOOR: No, all coin doors are randomly keyed for security purposes. Drill out and replace the lock.
- **SERVICE DOOR AND TRAP DOOR (WHEN PRESENT)**: These currently use the #106 lock and have for a number of years. However, we cannot guarantee that the production line wasn't short on 106 locks the day your table was made and "found" a



substitute, or that a prior owner did not change the locks. <u>There are no refunds on keys.</u> Older tables used #1155 or #2255 locks and we no longer stock these or their keys. Sometimes the best course is simply to drill out and replace the locks.

GOAL END: At the factory all Goals are keyed with <u>I8045 locks</u>, so if you have more
than one Dynamo table they should all have the same locks. Because we have no
way to guarantee the locks were not replaced, <u>there are no refunds on keys</u> still
applies.

Regarding the Goal End locks, this lock is rarely swapped or replaced because this is not at all a security-critical area of the table. Obviously, you want the coins secure, and really you want the electronics secure because they're not cheap if damaged; but the goal end is keyed basically because it's inconvenient if just anyone can get in there at any time. Nobody should change that lock.

WHAT'S THE CFM RATING ON YOUR BLOWER MOTORS? This is asked on occasion and before we reveal the answer, understand it is absolutely impossible to make a simple apples-to-apples comparison. The blower sends air into the air chambers in the playfield, and then that air is forced out through the holes in the laminate. If the blower is the source of air, think of the playfield as a giant air filter. The ultimate goal is to have uniform pressure throughout the playfield – whether directly over the blower or in the corner furthest away. Does a blower motor with more CFM need to force the air out through larger holes? Does a blower motor with fewer CFM have a playfield with narrower chambers? The point is: more CFM is not immediately better, fewer CFM is not immediately worse, and "upgrading" a motor is probably not going to make any difference. IS THE PLAY CONSISTENT? ARE THERE DEAD SPOTS?

30+ years of Dynamo tables still working and earning in the field are testimony to us having "got it right."



Coin and ProStyle blower motors have an output of approx. 375 CFM

Arctic Wind, Crafted Wood and Short Shot motors output approx. 130 CFM

And even this is WAY more than the playfield can process, so expect some air bleed. So don't start down the Tim Taylor / "Home Improvement" path to 'hot-rod' a table with a stronger blower - it won't help.

IF THERE'S GONNA BE AIR BLEED, WHY WOULD I NEED A BLOWER MOTOR GASKET? For vibration dampening. It helps the motor run more quietly.



#### **PUCKS & MALLETS**

MY PLAYFIELD IS CLEAN, BUT THE GAME PLAY IS STILL SLOW. Microscopic puck and mallet dents over time will interfere with the air cushion. Replace your pucks and mallets, or sand them with <u>240 grit sandpaper</u>.

WHAT MAKES DYNAMO PUCKS AND MALLETS SPECIAL? We use our own proprietary plastic formula. Our HEAVIER pucks tend to stay on the table and not fly off, but our pucks and mallets also have some FLEXIBILITY for better playing action. Imagine the difference between hitting something solid with a ball-peen hammer vs. a rubber mallet. The mallet has more give, and your wrist won't hurt as quickly or as much. Do our pucks and mallets cost a little more? Yes. Are they better? We think so. Our Webstore offers Dynamo mallets; and Dynamo pucks in 3½" size for coin operated and Pro-Style tables, and 2½" for the Short Shot, Crafted Wood and Arctic Wind tables.



MY PUCKS GET STUCK AFTER SCORING – WHAT CAN I DO? If you've already sanded your pucks smooth as mentioned above, it may be time to replace your PUCK DROPS inside the goal. These will begin to develop dents and dings over many years that eventually will cause your pucks to stick. And to answer "Why would you make them out of wood,

which is going to wear down?" if we used a harder material you'd be going through pucks like socks.

#### WHAT'S THE DIFFERENCE BETWEEN THE FLUORESCENT AND WHITE

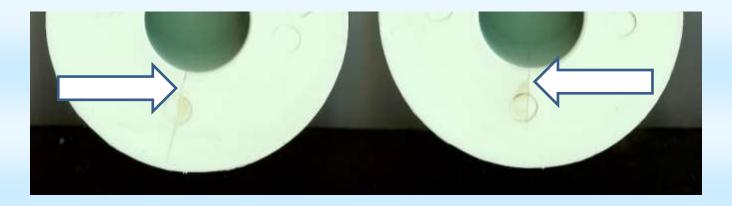
**PUCKS?** The greenish-yellowish fluorescent pucks are a harder compound, they play faster but can be noisy. The white pucks are a softer compound, they do not play as fast but will be quieter and are easier to bend out of shape.

Typically, fluorescent pucks provide the superior play experience, and the Quiet White pucks are better suited only for an environment where noise is likely to be an issue. The exception is the Quiet White pucks are best for the Polycarbonate playfield of the Cosmic Thunder.

3¼" fluorescent pucks weigh approximately 40 grams 3¼" Quiet White pucks weigh approximately 34.5 grams

2½" fluorescent pucks weigh approximately 18.5 grams 2½" Quiet White pucks weigh approximately 15.5 grams





**ARE MY BRAND-NEW MALLETS CRACKED? SEE THE FAINT LINE ON THE BOTTOM?** That's not a crack in the plastic, that's a surface line from the mold. It doesn't go through the plastic, doesn't affect the structural integrity of the mallet, won't affect performance, and will vanish instantly with a little rub of that 240 grit sandpaper.

MY MALLETS DID NOT COME WITH FELT PADS FOR THE BOTTOM, WHERE CAN I ORDER THEM FROM YOU? Dynamo Mallets have NEVER included felt pads, which degrade the playing experience without truly protecting the playfield.

While it would be easier on a basketball court if you played in house slippers, the basketball game would be awful. You wouldn't want to play there!! The BEST WAY to prevent playfield damage is to keep the surface clean and free of dust and particles. With bits on the playfield, it doesn't matter if there are felt pads or not, the dust will be the abrasive that damages the surface.



Always keep the bottom of your mallets sanded smooth with the <u>included 240-grit sandpaper</u>. Finally, no extra points are awarded if you press the mallet REAL HARD onto the playfield. <u>Use a light touch</u>.

After this, assuming you did still want to add Felt Pads, nobody has found a felt pad that will stay stuck to mallets more than a few weeks. You'll be forever chasing down additional sticky pads for the mallets.

### **PLAYFIELDS**

**HOW DO I CLEAN MY PLAYFIELD?** The simple explanation is to turn the blower on, apply Isopropyl alcohol to a clean cloth and wipe down the playfield. It will clean and evaporate quickly. Use only Isopropyl (rubbing) alcohol – literally like from the drug store. Oh sure, we could bottle and sell "Official Certified Dynamo Playfield cleaner" but it'd just be relabeled rubbing alcohol.



- **NEVER** pour any liquid directly onto the playfield, it will warp the playfield.
- NEVER use water as it will not evaporate quickly enough and warp the playfield.
- **NEVER** use furniture polish or protectants. The wonderful shine they give leaves a film that will slow play, collect grime even faster and possibly never completely come off.

Our <u>Playfield Care Service Bulletin</u> will give details on all aspects of playfield care and repair.

MY PLAYFIELD IS DAMAGED BEYOND ANY HOPE OF REPAIR, CAN I PURCHASE A REPLACEMENT? The answer is yes for coin-operated and Pro Style 8-foot and 7-foot tables, no for smaller tables except the current model Short Shot. Playfields are available in the Webstore, but are the most expensive part of the table, and they are expensive to send because they weigh over 180 pounds and must be shipped flat (shipping to non-residential addresses typically runs in the range of \$300, automatically added to the playfield price). Be forewarned: an Air Hockey table that is "in great shape, but just needs a new playfield" might not be as good a deal as it sounds.



## COULD I JUST CUT DOWN A LARGER PLAYFIELD TO FIT A 6 FOOT TABLE?

Definitely not, and this photo of an unlaminated playfield explains why. You would end up removing the outer framing. The rail bolts (note yellow arrows) would lack a solid anchor, and the inner air chambers (those long grooves) would be opened. It would be like trimming a few inches from a fish tank to make it smaller. All the water's going to get out unless you build all new walls. Consider replacing a 6-foot table in need of a new playfield with our <a href="Dynamo Short Shot">Dynamo Short Shot</a>.

WOW, PLAYFIELDS ARE KIND OF EXPENSIVE; COULD I JUST PUT A NEW LAMINATE ON MINE? In theory it would be possible, but on an 8-foot table that also means precisely drilling 4186 holes for airflow and carefully mounting that drilled laminate onto the air chambers to guarantee uniform pressure throughout the playfield. It's not as easy as it looks; only a machine has the accuracy and attention span. And before you ask, we do not sell drilled laminates separate from the playfield.

YOUR COMPETITORS' TABLES HAVE POLYCARBONATE AND STAINLESS STEEL PLAYFIELDS, WHY DO YOU STILL USE LAMINATE? An excellent question. Every company has their solutions to the playfield issue; we have looked into both playfields.

While a stainless steel surface would take longer to wear through, it is still susceptible to scratching. We also found a stainless steel surface more susceptible to small dents (dents that cannot be 'pounded out' because you cannot get behind them with the surface mounted on the playfield) and these small dents interrupt the uniform air cushion essential to good hockey play. Finally, the stainless steel surface is no better at resisting moisture than a laminate playfield because it is still mounted on wood (Historical fact on a similar note: the DeLorean car had a stainless steel exterior, but the stainless steel was still mounted on fiberglass panels). While the steel won't bubble like a laminate, the wood will still swell and result in an uneven surface.

Regarding polycarbonate, we've dipped our toe in the water with the <u>Cosmic Thunder</u> table. During the extensive Research & Development process for that we quickly learned that they are <u>expensive</u>, and for all the effort needed to make a polycarbonate playfield that'd retrofit to an existing Dynamo table, buying a new table with current electronics and updated parts would make far better sense. As far as whether to expand our offerings of polycarbonate playfield tables, let's see what happens.

While our laminate playfields are, we admit, the most expensive part of our tables; we've priced the stainless steel replacement playfields and they were considerably more expensive. Regarding polycarbonate, we were unable to find a manufacturer who offered replacements, but from what it costs us to buy them direct from the supplier for the Cosmic Thunder, it can't be good. Meaning if you plan to put a hockey table in a location for a few years and replace the table when the playfield wears, these tables might be attractive to you. If you want to INVEST in a table that you can keep in service for decades... and hundreds of Dynamo tables are decades old and still in service... and it might require a replacement playfield or two over the course of those decades, Dynamo is the table for you.

I KNOW THIS IS A COIN-OP/PRO STYLE FAQ PAGE, BUT ARE PLAYFIELDS AVAILBLE FOR THE CONSUMER TABLES SUCH AS THE ARCTIC FLASH, ARCTIC STAR, CLUB PRO AND ARCTIC WIND? Replacing the playfield on these tables would require disassembling them to a point that they would lose their structural integrity and could never be correctly reassembled again. Threaded nails and wood adhesives are used to build the cabinets. We do not offer playfields for the Consumer Grade tables and would recommend replacing the table if the playfield is sufficiently damaged to require replacement.



#### **ELECTRONICS**



I CAN'T PLUG IN MY COIN HOCKEY, DO YOU SELL A POWER CORD? Newer tables use a power cord that looks like the photo. It's called a C13 plug and is readily available in numerous lengths from just about anyone out there who sells extension cords because a ton of computer hardware (CPU, Printers, Monitors, etc.) uses this same format. You probably have a few.

We went to this because in older tables the cord was hard-wired to the table, in which case any cord like the one shown in the second photo with the exposed ends



in the length of your choice—also available from many places—can be attached to your table by someone who knows what they are doing with electrical work. Otherwise, we urge you

to consult with our Tech Support department before attempting this repair on your own – if done incorrectly you could damage your table... or yourself!!

**NOW I PLUGGED IN MY COIN HOCKEY AND IT'S NOT WORKING, EVEN WHEN I PUT IN COINS.** Coin games have a power on-off switch. On most older tables this can be found inside the service door (door on side of table secured with two locks). On newer tables it can be found underneath the cabinet (so there's no need to unlock the service door every time you want to turn it on or off). If you cannot find the switch, <u>PLEASE contact Tech Support</u> before you start ordering and replacing parts.

WHAT DOES IT MEAN WHEN MY COIN OR PRO STYLE TABLE DISPLAYS THIS CODE? We are working on an updated Troubleshooting list for some of the older boards, but these handy tips may be very helpful

- A display flashing "01" or "22" indicates a LEFT goal end sensor problem.
- $\bigcirc$  A display flashing "10" or "11" indicates a RIGHT goal end sensor problem. Remove or open the goal end and look for a foreign object or puck stuck in the goal area
  - A display flashing "08" indicates a problem with a Coin Switch <u>contact us</u> for more information.

WHY DOES MY TABLE SHUT DOWN AUTOMATICALLY? The current v7.2 PCB defaults to a 7-point game, it can be set as low as a 2-point game or as high as a 9-point game. It also has a timer built in that defaults to a 7-minute game. The times can be set to as high as a 16-minute game, or even to play only by score without regard to time. Both features are built in to keep your table from running for hours if the players wander off. We have posted



the Programming Parameters for the  $\underline{v7.2}$  and  $\underline{v9.0}$  boards currently used, and the recently discontinued but still popular  $\underline{v7.01}$  PCB. On new tables these instructions are attached to the inside of the Service Door.

#### Current PCBs look like (color may vary, and scale might be a little off):





V7.0 - U.S. 110v tables
without sound
part # 880400125
DISCONTINUED 2017
Replace with v7.2





V9.01 – U.S. 110v Tables with sound (Note removable EPROMs) Part# 880400140 DISCONTINUED IN 2016 Replace with v9.02



v6.11 – DISCONTINUED IN 1998

Replace with v7.2



v5.1 – DISCONTINUED LONG AGO

Also Replace with v7.2

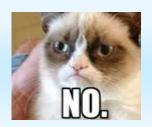


Also Replace with v7.2
(are you seeing a pattern?)

more photos of older board types posted as available.



DO YOU REPAIR FAILED AIR HOCKEY BOARDS? We do not. Many tables starting with the v2.4 board can be upgraded to the current v7.2 PCB, and that way you get the most current part with all the latest features and no "Repair history." YOU CAN PURCHASE THE v7.2 PCB INTERFACE KIT AT THIS LINK. This includes the board and the adapter to install it in an older table. Valley-Dynamo Tech Support will be able to help with the specifics.



**I DON'T SEE ANY PART NUMBERS LISTED FOR THE BOARD-LEVEL ELECTRICAL COMPONENTS, DO YOU SUPPLY THEM?** Because we do not build boards in-house we do not stock board-level repair components, not even for current production PC boards. As technology has progressed you are likely to find that components for older boards are now difficult or impossible to get from the usual suppliers. This led directly to the creation to the v7.2 PCB – it doesn't do that much more than the v7.0 – but the component bits are current and available!! Likewise the v9.0 with the v9.02. If you choose to attempt repairs, we have most board schematics posted on the site.

This includes the removable EPROMs on the v9.0 PCB – we no longer stock them.

CAN I GET ELECTRONIC PARTS FOR THE BLACK HOLE TABLE? The Dynamo Black Hole was manufactured for a brief time and only a few exist. It was equipped with a hybrid of proprietary parts and quite literal off-the-shelf PC components that have probably been discontinued since the tables—also discontinued—were produced. You should troubleshoot and discuss your problems with Tech Support before attempting ANY repairs or purchasing ANY parts.

MY TABLE HAS A COIN DOOR WITH ROLL DOWN MECHS, AND IT LOOKS LIKE THERE IS SPACE ON THAT DOOR FOR A BILL ACCEPTOR. CAN I ADD ONE? Yes, most 110v DBAs should work. Contact Tech Support.

CAN I ADD A BILL ACCEPTOR TO A TABLE WITH A PUSH CHUTE COIN MECH? No.

HOW CAN I CHANGE MY OLD PUSH CHUTE TABLE TO THE "CHEAT PROOF" MAGNETIC COIN SWITCH? Part # 030400500, the Coin Switch Modification kit will include the magnets and all the necessary hardware.

SOME DISHONEST PLAYERS AT ONE OF MY LOCATIONS DISCOVERED HOW TO CHEAT THE "CHEAT PROOF" COIN SWITCH. WHAT CAN I DO TO STOP THEM? Valley-Dynamo Tech Support will be able to help with the specifics. Posting too much here might "give folks ideas."



**CAN I INSTALL COIN OPERATION ON MY NON-COIN TABLE?** Coin tables are built from the ground up to accommodate the coin door and electronics. In a situation where you are torn between a coin and non-coin table, it's easier to set up a coin table for free play than to convert a non-coin table to coin operation. A lot like it is easier to turn a garage into a spare bedroom than a spare bedroom into a garage.

CAN I PURCHASE A HARDWARE KIT WITH ALL THE FASTENERS

**PREPACKAGED?** We kit-as-needed for overheads so there is no "Complete Hardware Kit" available for any Dynamo (or Valley or Tornado) product. We list the proper measurements and dimensions whenever possible in the instruction manual as you can probably source these items locally for less than it would cost to get them shipped from us.

DO YOU CARRY TOUCH UP PAINT FOR THE FLUORESCENT TRIM PIECES ON MY HOT FLASH, FIRE STORM OR BLACK HOLE AIR HOCKEY? The UV reactive surface on these pieces is powder coated, not painted. Finish flaws that may not be noticed under normal light are extremely obvious when the black light is used.

The problem when trying to touch up is that a finish that looks good under normal light can look bad under the black light and a finish that looks good under the black light can look bad under normal light.

Unfortunately, the best solution will be to replace any damaged rail or goal end. Obviously, that is expensive, but it will be the only complete solution with no guesswork or unknown problems. If you choose to try to find some sort of touch-up paint (which we do not stock), decide if it is more important that the part looks good under the black light, or in normal light. If black light is more important, you must get "UV reactive" paint and use care when painting as even the slightest flaw or change in paint thickness will be <u>very</u> obvious under the black light.

Completely replacing the new parts is the best way to have a new finish. The goal ends, side rails and goal end rails are available in the Webstore.

THE SIDE AND END DECALS ON MY AIR HOCKEY TABLE ARE WORN, WHAT REPLACEMENTS ARE AVAILABLE? The EXTERIOR DETAIL AND APPEARANCE WebStore category is where you can view and purchase all decals currently available.

I WANT TO MAKE MY OLD HOT FLASH II LOOK LIKE THAT BRAND NEW MODEL - DO YOU SELL THE DECALS? A set sells for about \$1000 plus shipping.



If your table is looking worn it's from making you a <u>lot</u> of money for a <u>lot</u> of years, maybe it's time for a new table?

HOW DO I GET THE CORNER PROTECTORS (part # 860400030) TO FIT ON MY OLDER DYNAMO TABLE? The corner covers introduced on the Dynamo Arena® were expanded to the entire Dynamo table line until we switched to rounded top rails. Old-style corner covers (part # 860400010) have not been available for around 20 years.

#### **NOW LET'S TALK ABOUT LIGHT BULBS:**

**SERIOUSLY? – THE 8-FOOT TABLE OVERHEADS JUST USE THE EXACT SAME 48" FLUORESCENT BULBS LIKE IN MY KITCHEN AND GARAGE?** Like MY kitchen and garage, maybe yours too, but yes, nothing exotic or unusual about them. Currently T-8's, older tables may still use T-12's.

WHY DON'T YOU SELL THEM?: Experience has shown half the bulbs we ever tried to ship arrived broken. A trip to the local hardware, discount or even grocery store will have them in your hands quicker, cheaper, and intact.

WHERE CAN I FIND BLACKLIGHT BULBS FOR MY HOT FLASH OR FIRE STORM OVERHEAD? This is just a standard 48" Fluorescent lamp in a Blacklight. Many hardware stores, and even some discount stores, and many online suppliers like 1000bulbs.com. While any "UV" or "Ultraviolet" lamp ought to bring out the glow, we've found the purple-coated bulbs do so a lot better

**DO YOU SELL A KIT TO CONVERT AN OVERHEAD FROM FLUORESCENT BULBS TO LED LIGHTING?** We do not. Because the light is essentially identical to "The kitchen and garage", just about any commercially available solution that will convert such lights from fluorescent with ballasts to LEDs will work in your Dynamo overhead.

WHAT KIND OF LIGHT BULBS GO IN THE CURRENT MODEL BLUE STREAK/PRO STYLE OVERHEAD? None, we use a self-contained 18" LED fixture in that application.

WHAT KIND OF LIGHT BULBS USED TO GO IN THE BLUE STREAK/PRO STYLE OVERHEAD? 15 watt "T-8" 18-inch fluorescent bulbs, which can sometimes still be found at many hardware stores and specialty lighting suppliers



WHAT KIND OF LIGHT BULBS WENT IN THE ARENA OVERHEAD? A 24 watt "2G11" base compact fluorescent, available at many Home Improvement and Lighting suppliers.

WHAT KIND OF LIGHT BULBS GO IN THE EMERGENCY BEACONS USED ON THE LATER ARENA OVERHEADS? Use a 25 watt, 120v T-8 "25T8C" Clear Tube Bulb. We do not stock this bulb but many specialty lighting suppliers do.

#### **OVERHEAD BALLASTS**

**CAN I PURCHASE A NEW BALLAST FOR MY 8-FOOT OVERHEAD?** As with light bulbs, your nearest hardware store or hardware or lighting products website will have a ballast, probably quicker and cheaper than if you were to get it from us. We use the **GE 232MVN** on our current overheads with T-8 bulbs but many others are fully compatible.

**CAN I PURCHASE A NEW BALLAST FOR MY OLD 8-FOOT OVERHEAD?** Older overheads used T-12 bulbs. If you can still find a ballast for use with T-12 bulbs, get it, because they're all but unavailable. Otherwise you'll need to update your overhead to use T-8 bulbs or replace it with a current-model overhead.

**CAN I PURCHASE LAMP SOCKETS FOR MY 8-FOOT OVERHEAD?** These are standard parts available from most hardware and lighting-specialty suppliers. If you switch from T-12 to T-8 sockets, you will likely need to switch ballasts as well.



CAN I PURCHASE A NEW BALLAST FOR MY 7-FOOT OVERHEAD? There isn't one. On the smaller-format 7-foot overheads with 18" bulbs, we used a self-contained unit like the one in the photo. The currently-used similar LED-based fixtures are available from most any hardware supplier (quicker and cheaper).

Tech Support can help you through splicing the wiring

to replace your current unit.

As noted here, once you get into the overhead, NOTHING having to do with lighting or light-bulbs is "Special Dynamo-only parts you must get from Dynamo". It's all fairly common off-the-shelf components.

CAN I GET PARTS FOR THE HELICOPTER-STYLE LIGHT ON MY ARENA AIR HOCKEY? Shortly after introduction we switched to an "Emergency" style beacon



light on the Arena Overhead and it's been over 13 years since we stocked the Helicopter light. If you need to replace the light or lamps in the light, run a search on the "American DJ H-450L" Helicopter Light and you should be able to find something comparable. The approximate retail price of that entire unit—when it was available-- was close to \$100. We heard faint laughter in the background when we asked the supplier for repair parts or a schematic – as surely they just bought them by the container-load from overseas.

HOW CAN I MOVE MY TABLE, AND SHOULD I DISASSEMBLE IT? It is preferable to simply remove the legs and overhead and move the table intact. When moving the table on a truck, move the table on its side, service door up, strapped to the wall of the truck, with thick cardboard wedged beneath to provide support. No matter how you move the table, always place something between the rail and floor to prevent damage, and ALWAYS take great care to protect the playfield from scratches or dents. As discussed earlier, the playfield is the most expensive part of the table and while we really like selling replacement playfields, you won't like paying for one if damaged in an avoidable accident. The playfield can be removed, contact us for detailed instructions.

Further disassembly is STONGLY DISCOURAGED. The wood sections are secured with wood glue AND staples AND glued spiral nails. Dynamo Hockey tables are sturdy and solid with good reason. **Take our word for it, but PLEASE DON'T TRY IT**: the table was designed to be dropped from shoulder height without falling apart. Again, please don't do this to prove a point; <u>dropping the table from shoulder height is not covered under Warranty</u>, no how, no way, not in anyone's wildest dreams.

If you absolutely insist on taking it apart or have no other choice (such as the rec room was built around the table and now you have to get it out—yes, it's happened), to have any hopes of putting it back together you will need a pry bar, rubber mallet, large hammer, grinder, and all new wooden cleats. Have some Bondo handy to fill in the plywood that comes apart. It's a full day's work if done correctly. We have no official directions or guide, so you are pretty much on your own. Take good notes and don't lose any parts.

### **GOAL ENDS**

I REPLACED A GOAL END ON MY TABLE AND SCORES NO LONGER REGISTER ON THAT SIDE. WHAT HAPPENED? The Optical Scoring sensor needs a non-reflective black background to "see" the puck pass by. Order Part # 850400470—the self-adhesive Scoring Opto-Shield. Gaffer tape also works. DON'T use electrical tape, it reflects light and won't help.



MY EXTREMELY-OLD QUICK-ENTRY GOAL ENDS HAVE A BOLT IN EACH LOWER CORNER, BUT THE REPLACEMENTS HAVE A SINGLE BOLT IN THE MIDDLE, WILL THEY WORK? Definitely, you will simply need to install a threaded insert in the middle of the existing puck drop (or table sidewall) so the single bolt has a solid attachment point.

WHAT'S A GOAL END SECOND? Occasionally we'll receive a goal end from the vendor with a slight cosmetic flaw, or that got a slight cosmetic flaw due to careless handling on the production line. The goal end is brand new and never used, it's simply not perfect enough to go on someone's \$xxxx new hockey table. Rather than go through the hassle and time of returning goal ends to the vendor for credit due to slight flaws, we frequently opt to offer them on our webstore at a discounted price.

Because it's a "judgement call" that a goal end is rejected by QC, it's impossible to predict when we may get Seconds. When they happen, they happen, but because old-style quick-entry goal ends have not been used in production for over 15 years, nearly any goal end second offered will be the current Hinged style.

MY GOAL END DOES NOT WANT TO OPEN, ARE YOU SURE IT USES A J8045 KEY? This isn't an area of the table where we've used an alternate or substitute lock. Does the key fit? If someone replaced the lock, the J8045 key won't fit; but on occasion, the lock can be difficult to open.

If from years of not being used – remove the upper two goal end bolts and flip the top lid down to relieve the stress.



If the table is new - the lock may be tight from the factory installation. Push in slightly on the goal end (where we've pointed with the white arrows) while turning the lock to relieve the pressure. Make sure it's not cross-threaded, in which case you might need to scoot the Goal End Nut Block inside its bracket for better positioning

Also - whenever the goal cover is touching the walls *do not* tighten the lock further. This will cause the goal cover to cave inward. The pressure of the goal against the lock will prevent it from opening freely, and pucks will get stuck more often.

CAN I CHANGE MY QUICK-ENTRY GOAL ENDS TO THE HINGED STYLE
THAT USES LOCKS? This is a very labor-intensive and difficult operation, and if



done incorrectly can result in serious (possibly irreparable) damage to your table. We do not recommend this.

NOT SURE WHAT GOAL ENDS YOU HAVE OR NEED? CLICK HERE FOR MORE INFORMATION

