

DURAFLEX AND DURAFIRM DIVING EQUIPMENT MAINTENANCE CHECKLIST

Springboard Diving Equipment manufactured by The Duraflex International Corporation is the finest available in the world. However, as with any equipment, proper maintenance and periodic safety checks are crucial. Prior to the start of your high school, college or summer league diving season, it is very important to perform a complete maintenance and safety check of your Duraflex and Durafirm Diving Equipment. Use the following checklist, developed by Springboards and More, to assist you in completing this task. Keep in mind that you can order any and all of the parts described below from our secure website (www.springboardsandmore.com) or by calling our Toll Free Phone Number (1-877-348-3246).

NUMBER	CHECK	MAINTENANCE ITEM DESCRIPTION
INFO	FYI	"Duraflex" (aka Duraflex International Corporation) manufactures Duraflex, Maxiflex and Maxiflex Model B ("Cheeseboard") Diving Boards as well as Durafirm 1 Meter, 3 Meter and "Short" Stand Diving Stands.
1		Verify that the Durafirm Dive Stand Installation Bolts (Item SF124, SF125, SF127, SF128, SF129, SF130 or SF132) are securely tightened and that the Main Support installation bolts have at least one large brass washer (Item SF138) per bolt. The Ladder Assembly installation requires TWO brass washers -- one 5/8" washer (Item SF138) and one 3/4" washer (Item SF139) per installation bolt. The Duraflex Factory recommends these bolts (or nuts if using thru rods) be tightened to 110 ft./lbs. of tension using an 18" long handle torque wrench. NOTE: In many cases, a long-handled torque wrench will not fit due to size constraints in and around the diving stand installation. (Requires a 15/16" wrench or socket to complete this task).
2		Verify that there is at least ONE Square Shim (Item MP108) underneath each "foot" of the Durafirm Stand or at least ONE Round Shim (Item MP107) under each connection point of a Durafirm "Short" Stand. Additional shims may be needed to level the diving stand but at least one should be present under each point of contact with the pool deck or cement pedestal. (If shims or additional shims are needed, use a 15/16" wrench or socket to loosen stand installation bolts, slide shims under each foot and then re-tighten bolts or nuts).
3		The diving board should be level -- or very nearly level with the fulcrum set on "5" using the Calibrated Number Strip on the diving board (Item P167) as your reference. Use a 6' - 8' level to check for levelness. <i>If the diving board is NOT level, see our information sheet entitled "Suggestions for Leveling a Durafirm Stand or Duraflex / Maxi-B Diving Board."</i>
4		Verify that all Guard Rail Clamps (Item C207) are attached and that all Guard Rail Clamp Bolts (Item SF117, SF118, SF119 or SF153) are securely tightened. (Requires a 1/2" wrench or socket to complete this task). If a Rail Clamp is missing, loosen the next clamp "up" from the missing clamp, slide it down the guard rail tubing to the missing area, re-attach and tighten guard rail clamp bolt and then repeat this process until you are able to slide a new clamp onto the rail tube and tighten it in place at the most forward connection point. It is NEVER a good idea to completely remove the guard rail in order to add a clamp. See also <i>"Suggestions for Installing / Replacing Guard Rail Tubing and Hardware."</i>
5		Verify that all Guard Rail Arms are securely attached to the Fulcrum Box. Each Guard Rail Arm should be attached with FIVE 3/8" x 1 1/4" aluminum hex head bolts and nuts (Item SF105). (Requires two 9/16" wrenches and/or sockets to perform this task).

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6		Verify that every stainless steel guard rail tube has a plastic Guard Rail Plug (Item C107) in each exposed end. This is to prevent somebody from getting cut or scratched on the edges of the tubing.
7		Verify that the rectangular Cross Braces are securely attached to the front and back of the Main Support Assembly (aka the "legs" of Durafirm Stands onto which the fulcrum box attaches). There should be FOUR 3/8" x 1 1/4" aluminum hex head bolts and nuts (Item SF105) per cross brace. (Requires two 9/16" wrenches or sockets to complete this task).
8		Verify that Hinge Plate is securely attached to the Ladder Assembly with SIX round head bolts and nuts (Item SF103). Requires 9/16" wrench or socket and flathead screwdriver to complete this task. INSTALLATION TIP: Position the hinge plate where the diving board is most level. Install the MIDDLE bolt on EACH side of the hinge plate FIRST and finger tighten the nut, then install the other four bolts and nuts in an alternating pattern. Use wrench and screwdriver to verify tightness of all six bolts).
9		Verify that Hinge Assemblies (Item C202) are securely attached to the Hinge Plate (for Durafirm Stands) or to the Back Anchor Fitting (for "Short" Stands). Each Hinge Assembly should have FOUR 3/8" x 1 1/2" aluminum hex head bolts and nuts (Item SF106). (Requires two 9/16" wrenches and/or sockets to complete this task).
10		Verify that each step (Item C200) is securely attached to both sides of the ladder assembly. Each step should have TWO 3/8" x 1 1/4" aluminum flathead bolts and nuts (Item SF103) PER SIDE of the ladder assembly. (Requires 9/16" wrench or socket AND flathead screwdriver to complete this task).
11		Verify that the Fulcrum Box is securely attached to the Main Support Assembly (on Durafirm Stands -- not applicable on "Short" Stands) with three 5/8" x 3" aluminum hex head bolts, nuts and TWO washers -- one washer on top and one washer on bottom -- (Item SF108). (Requires two 15/16" wrenches or sockets to complete this task).
12		Verify that Hinge Assemblies (Item C202) are not missing any Nyliners ("Bushings") (Item C209) or "O" Rings (Item C210). Each hinge assembly should have FOUR Nyliners and TWO "O" Rings. You can tell if Nyliners are missing or broken if the Hinge Pin (Item C203) rattles inside the Hinge Assembly when the diving board is bounced. You can tell if "O" Rings are missing simply by looking or if the Hinge Pin has worked its way out of the Hinge Assembly. <i>See our information sheet entitled "Suggestions for Replacing Hinge Pins, Nyliners and "O" Rings."</i>
13		Verify that the two Diving Board Carriage Bolts (Item SF122) that hold the diving board to the Hinge Assemblies are securely tightened. The factory recommendation is to tighten these bronze bolts to 110 ft. / lbs. of tension using an 18" handle torque wrench. There is no need to add a washer to this bolt. INSTALLATION TIP: When the board is first installed, insert both board bolts and finger tighten the nuts. Then pick-up the board about 1 foot and drop it on the fulcrum roller -- this allows the diving board to "find its center" (unless "its center" is off center) -- then tighten the board bolts per factory recommendations. <i>NOTE: If your diving board does NOT "find its center" (i.e. the board pulls to one side when bounced), see #22 of this checklist.</i>
14		Verify that the diving board has all three rubber grommet pieces inserted in the tip end of the diving board -- Left, Center and Right. (Items PM108L, PM112, PM108R respectively).

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15		Verify that Fulcrum Slide Tracks (Item C208A) are securely attached with FIVE slide track bolts (Item 529). Check the surface of the slide tracks -- they should be all BLACK. If you notice shiny metal, scratches or similar, the tracks should be replaced. (Requires 1/2" wrench or socket to remove and / or install this item). <i>See our information sheet entitled "Suggestions for Replacing Durafirm Slide Tracks."</i>
16		When replacing any of the "painted" bolts on your Durafirm Equipment, the Duraflex factory recommends that you paint the head and contact point of the bolt and / or nut with "buff" color touch-up paint (Item MP105). This helps to form a seal around those contact points and keeps water from seeping in to the hole possibly causing corrosion.
17		Check the surface of your diving board for any paint chips and use the "aqua" color touch-up paint kit (Item MP106) to apply a coating to those areas. NOTE: Only for very small areas. For large paint chip areas or if board is slippery, contact Springboards and More to arrange for Duraflex Factory Refinishing.
18		Check the non-skid surface of the diving board by applying some water to it and dragging your bare foot across to check for slipperiness. This is especially important on the tip end of the board over the water. If the board is slippery, you must immediately take it out of service and call Springboards and More to arrange for Duraflex factory refinishing. If applicable, you could also apply (Duraflex factory recommended) 3M Safety Walk Strips to the tip end of the diving board per the instructions. This should provide the necessary (although temporary) non-skid surface to the board to get through the end of your season after which you should have your diving board factory refinished. <i>See "Alternative to Factory Refinishing of a Diving Board" and "Duraflex / Maxi-B Diving Board Factory Refinishing."</i> NOTE: No other method of re-surfacing is acceptable.
19		Verify that all fulcrum "small parts" are present, properly installed and tightened. The fulcrum assembly should roll back and forth easily and with little or no noise from the fulcrum area when diving board is bounced. <i>See our information sheet entitled "How to Repair and Maintain A Duraflex Fulcrum Assembly." and "Duraflex Fulcrum Assembly Exploded View" (pdf).</i>
20		Verify that there are EIGHT Rubber Channels (Item MP112) securely attached to the underside of the diving board. Replace any that are missing, split or only partially attached -- it is usually a good idea to replace all eight channels if any one is in need of replacement.
21		Verify that the fulcrum roller is never allowed to come into direct contact with the metal of the diving board -- this will void the warranty of your board. To check, roll the fulcrum to the most forward and the most rear position and be sure that it never "rolls off" the rubber channels. The cause of this situation is usually the result of your diving stand being incorrectly installed for the diving board that you use. For example, your stand is installed correctly for use with a (Recreational model) 16' Duraflex Board and you use a (Competition Model) 16' Maxiflex Model B ("Cheeseboard"). The correct way to fix this problem is to reinstall the stand to fit the board you are using. The quick fix is to add a set of 6" Rubber Channels (Item MP110) to the underside of the diving board to the effected area.

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22		Stand behind your diving board and verify that it does not "pull to one side" when bounced or even when at rest. If your diving board does, it usually means that the Main Support Assembly and the Ladder Assembly are not "square" to one another. For Durafirm Stands (with legs), this problem can usually be corrected by loosening the bolts / nuts that hold the ladder assembly to the pool deck and move the diving stand (slightly in the same direction as the board pulls) and then re-tighten the bolts / nuts. This cannot be done on a "Short Stand." DO NOT add shims or washers to the hinge assembly as a method of fixing this problem. NOTE: If your board pulls so far to one side that it contacts the guard rail arm every time it is bounced, you should completely (and correctly) re-install your diving stand.
23		Carefully examine your diving board for cracks. Pay particular attention to the sides ("ribs") especially in the area just above the Rubber Channels or any area where the metal of the diving board has directly contacted the fulcrum roller or guard rail arm. (See # 21 and #22). If you have a "cheeseboard," carefully examine the "cheese" area of the diving board for cracks on both the sides and the top of the diving board.
24		Using WD-40, paint thinner or similar de-greaser solution, thoroughly wipe off all parts of the slide tracks including the top, both sides and the inside bottom (where the anti-rattle clamp slides). Apply a THIN layer of grease to the slide tracks and spread evenly over these same four areas.
25		Add a few drops of "3 in 1" Oil (or similar product) to the hole in the top middle of each Hinge Assembly. Repeat this again after fulcrum has been cleaned and greased. You should make this part of your normal equipment maintenance routine -- that is, it should be done every time the fulcrum is cleaned and greased.
26		Record the serial number of your diving board(s). The serial number can be found on the small metal tag that is attached to the top of the diving board between the two large bronze bolts (Item SF122) that attach the diving board to the hinges. For diving boards manufactured after 1987, the serial number will consist of one letter followed by six numbers. The letter will describe the model of the diving board as follows: D = Duraflex; M = Maxiflex and B = Maxiflex Model "B" (aka "Cheeseboard"). The first two numbers refer to the year in which the diving board was manufactured as follows: 93 = 1993; 02 = 2002; etc. The last four digits of the serial number are the sequential production number for that diving board. Serial number B020483 = The 483rd Model B Cheeseboard manufactured in 2002. Diving boards manufactured before 1987, will not have this serial number format.
27		Record the diving stand casting number from both the Main Support Assembly and the Ladder Assembly. These numbers are important to know because in the event that a piece of your Diving Stand needs to be replaced or if you plan to add additional Duraflex equipment to your pool deck, the factory will know the correct stand height that you need in order to match your existing equipment. Casting numbers will start with 3M or 1M and will end with a "dash" number -- for example: -3 or -10. In most cases, the "dash" number is the same for both the Main Support Assembly and the Ladder Assembly. Keep in mind that Duraflex manufactures FIVE different height 1M stands and THREE different height 3M stands to accommodate different pool deck to water levels.
28		If you have any questions about Duraflex Equipment Maintenance or Installation, please feel free to contact us. Best Wishes for a Safe and Successful Diving Season!