

PRODUCT SERVICE DIVISION (NORTH AMERICA) SDB NO. 5988
TECHNICAL SERVICES DEPARTMENT

PAGE 1 OF 6

SERVICE DATA BULLETIN

 ISSUED: 06-04-98
 REISSUED: 00-00-00

SUBJECT: Repair Alignment Procedures

UNIT(S): DW744 10" Table Saw

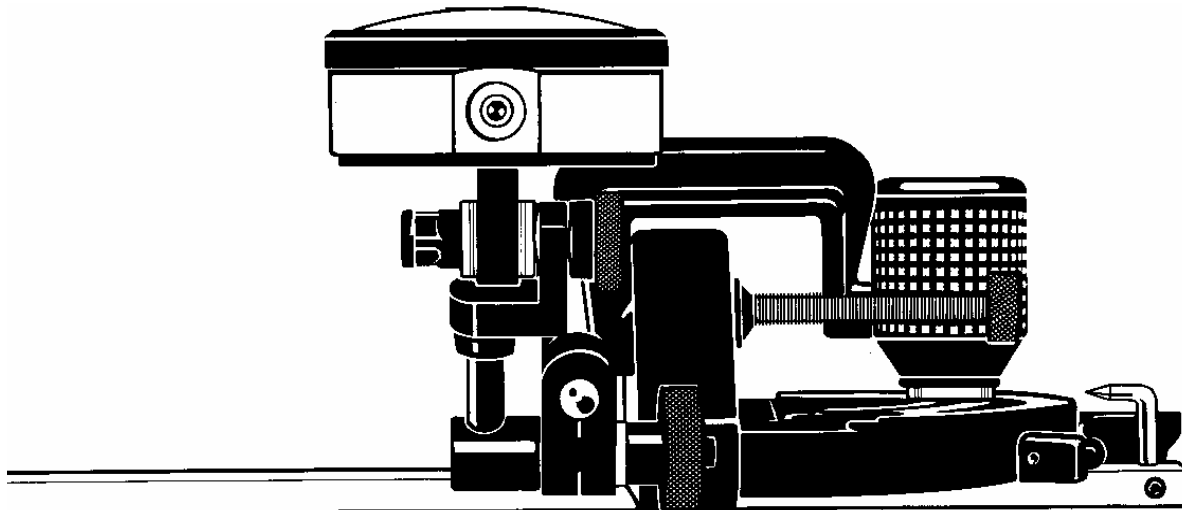
Equipment Needed:

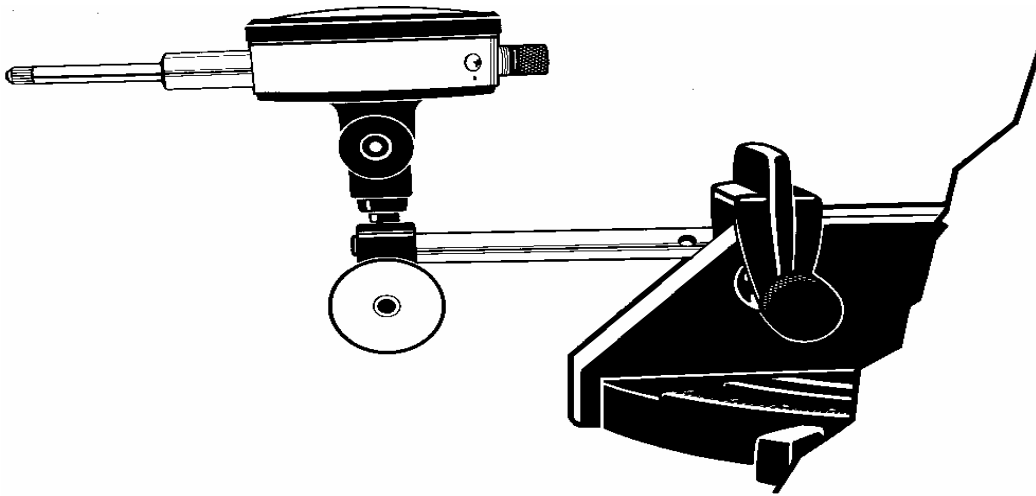
The following pieces of equipment are needed to properly align the saw.

Description	SRT	Part Number	Qty
C-Clamp with 5/16" shank	534	233802-00	1
Dial Indicator	534	233802-01	1
Holder with 1/4" shank	534	233802-02	1
Clamp with holes for 1/4" and 5/16" shanks	534	233802-03	1
.010" Shim		385369-00	as needed

Assembly:

1. In the indicator box, there is a small piece of paper with diagrams on both sides. Use these diagrams as reference as you continue with this section.
2. In the dial indicator box, you will find two tolerance hands. They simply snap onto the face of the indicator. Also in the box, you will find a bezel clamp and thumb screw.
3. In the top of the indicator, there is a small Phillips head screw. Remove this screw and replace it with the bezel clamp and thumb screw.
4. Follow the diagrams below to attach the indicator to the c-clamp.

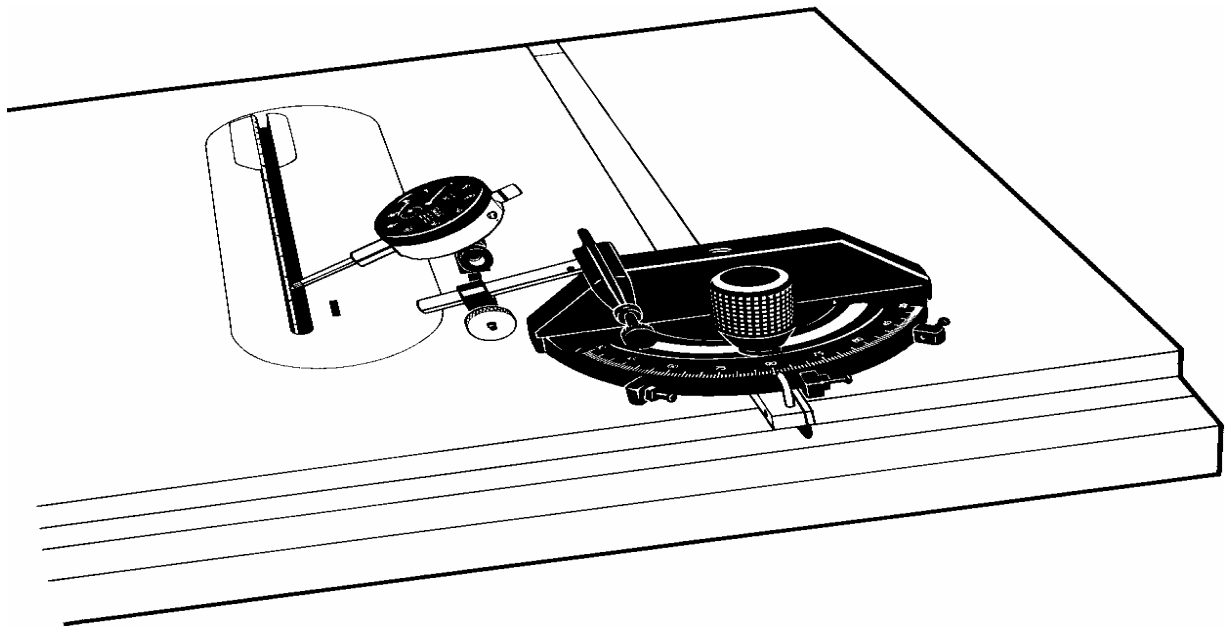




How to read the indicator:

Each mark on the indicator face is .001". The total travel for the indicator pointer is 1". The outer black ring rotates so that you can zero the indicator. The bezel clamp will prevent the outer ring from rotating.

BLADE ALIGNMENT -



BLADE ALIGNMENT CONT'D.

Bring blade to 0° bevel

Objective:

To assure that the tolerance from the front of the blade to the rear of the blade (with respect to the miter gauge slot on the right side of the table) is within design specifications.

Procedure:

1. Slide the miter gauge assembly (ITEM 133) into the slot on the right side of the table.
2. Clamp the alignment fixture to the miter gauge head so that the indicator is pointing towards the blade (See drawings on page 2).
3. Slide the whole assembly so that the indicator touches a blade tooth at the front of the blade (reference above picture).
4. Adjust the fixture so the indicator is not in contact with any carbide tips.
5. Note where the needle is on the indicator. The allowable tolerance for the blade at 0° from the front of the blade to the rear is +/- .010".
6. Slide the fixture forward while rotating the blade and measure the SAME tooth now at the rear of the blade. Be sure to keep the indicator off of the painted edge and the carbide tooth.
7. Note what the indicator reads. If the measurement is less then the allowable tolerance, STOP and go to the instructions for the blade at 45°. If it is more, then CONTINUE.
8. Loosen, do not remove, the two hex bolts (ITEM 49) located in the rear under the table that mount the support plate (ITEM 31) to the table.
9. Slide support plate side to side until the rear indicator measurement is within the allowable tolerance. Do not pry against the gear case.
10. Tighten the hex bolts (ITEM 49) while continuing to pay attention to the indicator face as to assure the needle stays within tolerance.

Bevel Blade to 45°

Objective:

Same as above except that this time the blade is beveled to 45°.

Procedure:

1. Repeat the procedures above to measure front and rear distances of blade to miter gauge slot.
2. The allowable tolerance for the blade at 45° from the front of the blade to the rear is +/- .025". Determine direction of back of blade (right or left).
3. If out of parallel, loosen the two hex screws (ITEM 49) and insert the shim(s) between the pivot bracket and the table per the following:

OUT OF PARALLEL

0.000 - 0.005"
0.005 - 0.010" TO RIGHT
0.010 - 0.015" TO RIGHT
0.005 - 0.010" TO LEFT
0.010 - 0.015" TO LEFT

SHIM

NONE
1 SHIM AT REAR
2 SHIMS AT REAR
1 SHIM AT FRONT
2 SHIMS AT FRONT

4. Retighten screws, recheck parallelism at 0° and 45° bevel and readjust if necessary. After final adjustment, torque screws to 80-100 in.-lbs.

BEVEL LOCK ASSY -

Objective:

To properly assembly the bevel lock to keep the blade from slipping out of the beveled angle.

Procedure:

1. Place lever (ITEM 91) in the unlocked position.
2. Bent section of lock rod (ITEM 94) must face away from table top. Insure that the ears on the lock rod are engaged into the slots in the back of the bearing block (ITEM 44).
3. Torque front nut (ITEM 98) to 160-190 in.-lbs.
4. Insert a .030" feeler gauge between the rear lock bracket (ITEM 95) and support plate (ITEM 31).
5. Tighten rear nut (ITEM 98) allowing enough space to remove gauge. Make sure there is no slippage when assembly is locked.

PINION BEARING ASSY -

Objective:

To assure smooth travel of the extension rails and prevent pinion from skipping rack teeth.

Procedure:

1. On the bottom of the pinion bearing assembly (ITEM 6), under one of the slotted holes, there is a screw inside of the assembly.
2. With the rails in closed position, back out the screw so that it touches the housing of the pinion bearing assembly, then tighten a half turn on both front and back.
3. Check so that rails slide smoothly on the pinion.

PARALLEL FENCE -

Objective:

To align the fence parallel to the blade.

Procedure:

1. Be sure blade is at 0° bevel.
2. Lock fence down to rails and unlock the rail lock (ITEM 87).
3. To align the fence to the blade, place fence (ITEM 138) against right side of blade.
4. Loosen the two hex bolts (ITEM 20) so that the parallel plate is able to move side to side.
5. Grab the rear pinion (ITEM 27) and adjust the back rail so that the fence is parallel with the blade.
6. If there is not enough side to side travel to allow paralleling of fence, check to see if pinion has skipped rack tooth. If so, skip pinion gear (ITEM 27) to rack (ITEM 5) mesh until fence is parallel.
7. Lock rails, then torque the hex bolts (ITEM 20) to 90 in.-lbs.

SDB NO. 5988
PAGE 5 OF 6
ISSUED: 06-04-98
REISSUED: 00-00-00

BELLEVILLE WASHERS (RAIL LOCK ASSEMBLY) -

Objective:

To properly assemble and adjust belleville washers so the rail lock assembly works correctly.

Procedure:

1. Orient washers <><> (ITEM 17).
2. Push down on the lever (ITEM 87) to lock the rail lock mechanism.
3. Tighten nut (ITEM 21) until snug. The gap between the 2nd and 3rd washer should almost be closed.
4. Then loosen the nut ½ turn.

GUARD/SHIMS -

Objective:

To assure the splitter is aligned directly behind the blade. When properly aligned, the splitter will be in line with the blade at both the table top level and at the top of the blade. This when used properly with the kick back paws, helps in reducing kick back of the work piece.

Procedure:

1. Because of the various thickness of saw blades on the market, use the shims (ITEM 47) to align splitter (ITEM 132) directly behind blade.
2. Raise the saw blade to its maximum elevation.
3. The bottom edge of the splitter should be aligned with the blade body. If they are not aligned, remove the guard, adjust the shims, then reinsert the blade guard.
4. Be sure that the slots in the splitter rest on the two fastener bolts. Be sure the guard splitter does not touch the table.

5. Retighten the guard mounting screws to 51-60 in.-lbs.
6. Operate the blade height and tilt mechanisms as far as they will go in each direction making sure that the guard clears the blade in all situations.

BEVEL STOPS

Objective:

To properly set the stops at the 0° and 45° bevel stops.

Procedure:

Adjust the Left Side (as viewed from the front)

1. Loosen the 0° bevel stop.
2. Place a 90° square on the table and bevel the blade to meet, then lock the bevel mechanism.
3. Rotate left level stop (ITEM 79A) until it touches the bearing block (ITEM 44).
4. Tighten bevel stop screw (ITEM 82).
5. Adjust the pointer (ITEM 84) to zero degrees.

Now Adjust the Right Side

1. Loosen the 45° bevel stop.
2. Place a 45° square on the table and bevel the blade to meet, then lock the bevel mechanism.
3. Rotate right bevel stop (ITEM 79B) until it touches the bearing block (ITEM 44).
4. Tighten bevel stop screw (ITEM 82).