This is the front of a W74, However the W124 and W184 are constructed the same…only larger and heavier.

Back of W74

Back with rear cover removed

Lets get to it!!! lock the front door and tilt the machine on it's face. Place 2- 2x4 blocks of wood so the front panel rest on the wood…if you don't you may at this time want to order a new selector switch, maybe a door, a timer from the bent shaft and the clear plastic cover for the timer…get a couple pieces of 2x4 it's your friend here and considerably cheaper.

Remove the snap ring from the belt pulley or nut if it has one. Place a H beam puller with bolts and nuts to pull the pulley off. Do not heat this piece as it's aluminum. PAY attention here…the small rubber seal on the backside of the pulley is sometimes not included in a rebuild kit, so keep this seal. If you cannot find a H puller, buy a steering wheel puller at Sears, it will work too.

Remove the 4 bolts that hold the rear trunion housing on. NOTICE the trunion housing has a marking “UP” , remember this. Place a Sears 8” puller on the housing ears, tighten the puller and hit the centerbolt of the puller with a 2# hammer, the housing will pop off.

If the bearing didn’t stay in the housing, place the puller back around the bearing and remove from the shaft.

REMOVE THE SNAP RING FROM THE GREASE,….. REPEAT…REMOVE THE SNAP RING… then remove the spacer.

Remove the hoses and water connection panel from the rear gable. Remove the gable band clamp.

Place a large flat screw driver between the rear gable and outer drum and GENTLY pry all around..SMALL STEPS ON THE PRYING THERE HERCULISE, You DON'T WANT TO BEND THE DRUM FLANGE.

Remove the inner drum and gable as one piece and place it on the floor, the W74 is easy to do your self, W124 you may want help, W184 Get help, you'll need it…unless your into hernia operations. You did remove that snap ring from the step above correct? …if not, do it now it your last chance.

Install the rear trunion without the bearings back on the gable and snug the 4 bolts. Install the 8" puller and pull the rear gable, bearing and housing off as one piece from the inner drum. IF IT DOES NOT REMOVE EASILY, STOP, STOP!….. YOU DID REMOVE THE SNAP RING CORRECT???

Remove the rear trunion and bearing. Look closer….notice the direction of the seal lips in the gable. Two seals face (cups) towards the inner drum, one seal faces towards the trunion. There will be a test,…… remember this.

Notice the grooves in the sleeve? This is from the rubber seals running on the sleeve, it did it's job until the wearable part…the sleeve, was worn past the seal lips…and then started leaking water into the bearings. This machine was obviously run for a while before I got it and did the rebuild.

This is the time consuming part…take your time here. Safety glasses are required, you get two eyes, let's keep them. Take a 4 ½" rotary disc steel grinder and grind a flat onto the wear ring until you are about 1/16" from the shaft. Now 180 degrees from that flat do it again. Take a flat chisel and tap the wear ring and split the wear ring from the shaft.

Use 0000 steel wool and polish the drum shaft…if you nicked the shaft with your grinding effort, start with emery cloth and then finish with 0000 steel wool.

Trial fit the new wear ring…if it drops on, mix up some JB weld or waterproof epoxy and install the wear ring. If it doesn't drop on, spray WD40 on the shaft. Place the wear ring into the kitchen oven and heat the wear ring at 400 deg for 20 minutes. Remove from oven and the wear ring will drop on the shaft…DO not force cool with water, let it cool naturally. I had help from mother nature…it snowed and was very cold outside so I chilled the shaft and the 400 degree sleeve dropped on. Don't even think about placing the drum in your freezer…


WD-4

Now is a good time to clean the rear gable, most important is the weep hole in between the two and single seals. Obviously yours is plugged as the one in the photo, so we are spending this 3-4 hours together doing a bearing job because water collected in the bearings. Look closely once again where the seals are set, and the direction of the seal cups. Drive out the old seals and throw away. Clean hole with mineral spirits and a stiff brush… CLEAN. Remove the outer drum seal and clean the groove. NOTICE DIRECTION OF TAPER ON THIS OUTER SEAL. I used a wire brush on my grinder to clean the rear gable.

Install the new seals with a small block of wood and a dead shot hammer. CAREFUL NOT TO BEND THE SEAL LIPS OR DISTORT THE OUTER STEEL RING. There is a tool for this called a seal installer, it's the same outside diameter as the seal with a steel shaft that you tap on with a hammer. You may check your local Auto Zone to "rent" this tool, it does make the job easier…although not required. Install a light coating of WD40 on the outer lip of the new seal, it will assist in sliding into the gable. With the gable back facing you, insert the seal cup side facing you. Turn the gable over and do the same, inserting the seal so as the cup faces you, and once again insert another seal, cup facing you. If you notice the double seal cups towards the water side on the inner portion of the gable and the single rear seal cups toward the grease from the trunion. In between the gable double seal and single seal you should be able to see the weep hole. This hole, IF water was to escape the seal, would, should, drain out the weep hole before getting to the bearing. Install new outer seal, by gently tapping into groove.

Install the gable onto the drum shaft. Lightly spray WD40 on the shaft and gently slide the gable onto the shaft. Install the new bearing into the gable, wear ring and snap ring.

I like to take the old bearing and separate the inner from the outer race. Take the old inner race and grind the hole a little larger so the race slides easily on and off the shaft. Or use the spacer to drive on. DO NOT drive on the new bearing with a punch. Place the new “SEALED” bearing on the shaft and slide your newly made bearing driving tool or old spacer on and gently tap the bearing into the rear housing until it stops…you will know as you tap on the old driving race/ tool it will, ping, ping, ping, “thud”. It’s seated. As stated above, after new bearing install spacer then snap ring.

Sealed bearings are prepacked with grease…this is the ONLY way to go. DON’T replace with open caged bearings that you have to pack.

Install trunion and tighten bolts. Notice “UP” on trunion, align with “UP” on rear gable.

Install rear trunion “SEALED” bearing. Install bearing in the same manner as inner trunion sealed bearing by removing the inner from outer race from the old bearing, grinding out the center and tapping the new bearing in.

Install the pulley and new pulley seal if you received one. Install the snap ring or nut to hold the pulley to the shaft.

Place a light coating of silicone sealant around the new tub seal, clean the scale off the stainless drum.

Lift the entire mock up and set into the outer washer drum. Install the band clamps and tighten equally each side…gently tapping outside edge of band with a dead shot hammer as you tighten the clamps.

Attach the hoses and top water valve panel. Attach belt to motor, install rear panel. Tip washer back on it's base.

Open the door and spin the drum….NO noise!!! Great job!!

Bee Smart has a great rebuild kit. Mr. Bob Bowley has passed on, those that never had the opportunity to speak with him really missed a great man…he helped me A LOT with my Milnor's when I first bought our mat….I'm just paying forward my due for his kindness and generosity to me. His kits are still available…he even has a cheater kit that uses a sleeve over the wear ring if you elect not to remove the thick wear ring. If you use this cheater, you MUST use his seals also, as they are a tad larger on the inside diameter to compensate for the sleeve thickness. I personally like the idea of removing the old wear ring. Bee Smart also has a kit if the rear trunion bearing area is egg shaped. It's made to hold a new race and bearing. It's called a "housing saver". 99.9% of us will never need this part…if you do, You seriously need to do maintenance a lot sooner than this time around.

If you need feel free to email me at any time Richard@timberland-usa.com I don't work on machines for a living. We happen to own a laundry and a few other businesses…so I stay pretty busy. I enjoy mechanical rebuilding of most anything. Hope this rebuild saves you some cash.

I left a lot of white space for a reason on this paper…use it to your advantage, by adding NOTES and sketching what you see or how something is hooked up BEFORE you take it apart. Cameras or cell phone cameras are a huge help in "remembering" where things attach. I think this write up has at least two references on the location of the seals in the rear gable….I get at least a email every two months asking how the seals were to be installed. Please take your time in reading this entire write up and make those notes…….remember the part about a quiz, lol.

It's been my pleasure,

Richard