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TECHNICAL
BRIEF

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Conveyor Wheel Replacement

Monitoring carrier wheel wear is a daily maintenance procedure. The carrier wheels are what pick up the barrier and transfer it to the new location. The carrier wheels are manufactured from a polyurethane material. Typically those wheels at the end of the machine and in the turn sections will have a shorter life than wheels in the straight sections. If the wheel wears excessively, the carrier wheel hub can come in contact with the bottom of the "T" head of the barrier. Hub contact will cause un-repairable damage to the barrier head and lead to accelerated conveyor wheel wear in the future.

Furthermore, if the hubs were to come in contact with the bottom of the barrier head, damage would also start occurring to the hubs, the bearings and the spindles. Another wear consideration is whether the wheel has unusual wear patterns or broken sections. Broken sections of the wheel do not allow normal operation and are an indication of pending premature wheel failure.

To check normal wear use the supplied wear gauge, shown in figure 1 below.
Position the gauge against the carrier wheel as shown. If the tab on the gauge makes contact with the raised outer portion of the hub the wheel must be replaced.

Figure 1
*Wear Gauge in Po**sition***

The surface of the carrier wheel that the gauge is laid on will be somewhat rounded. The gauge should be centered on the curve to take the gauge reading. Besides using the gauge, a visual inspection needs to be done on the individual carrier wheels. Sometimes the wheels will develop cracking on the surfaces that ride against the barrier. As long as the wheel is intact and passes the gauge test above it can remain on the machine. If significant sections break off the wheel (2 cubic cm or greater) it must be replaced. The wheels are best replaced from a mechanics "creeper" under the conveyor system.

Figure 2 Hub Wrench (B981222)

To replace the conveyor wheel, place the hub wrench, shown in figure 2, on back of the hub to keep hub from spinning, as shown in figure 3 below. Then using a ¾ inch or 19mm wrench or socket remove the four bolts and the back-up plate (B880601) as shown in figure 4, below.

Pull off Conveyor wheel (B970115) and replace it with a new one. Put the back-up plate in place and insert the four bolts. Then, use the Hub Wrench and the torque wrench, to torque the bolts to 70 ft/lbs, or 95 Newton-meters.

Figure 3 Hub Wrench in position

Figure 4 Torque Wrench in position with hub wrench