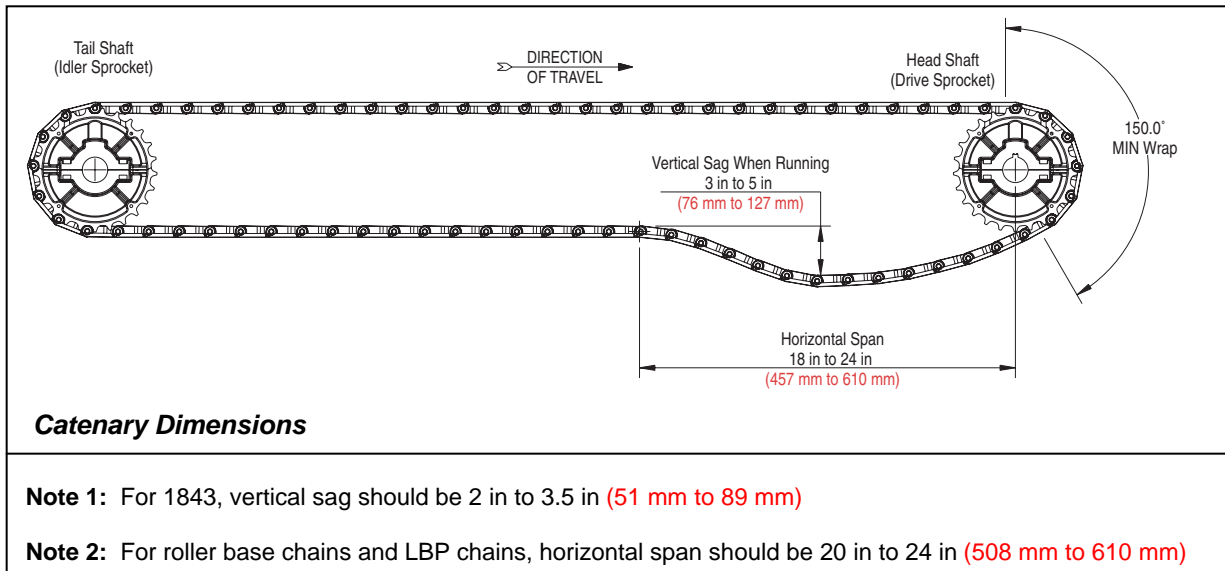


Maintenance Manual

Installation - Catenary Sag

- The function of the catenary is to allow a place for excess chain to accumulate
- Table Top chains should never be run tight
- The catenary sag should be measured when running with product
- If the catenary sag is excessive or increases due to normal wear, it should be adjusted by removing links to obtain the proper sag



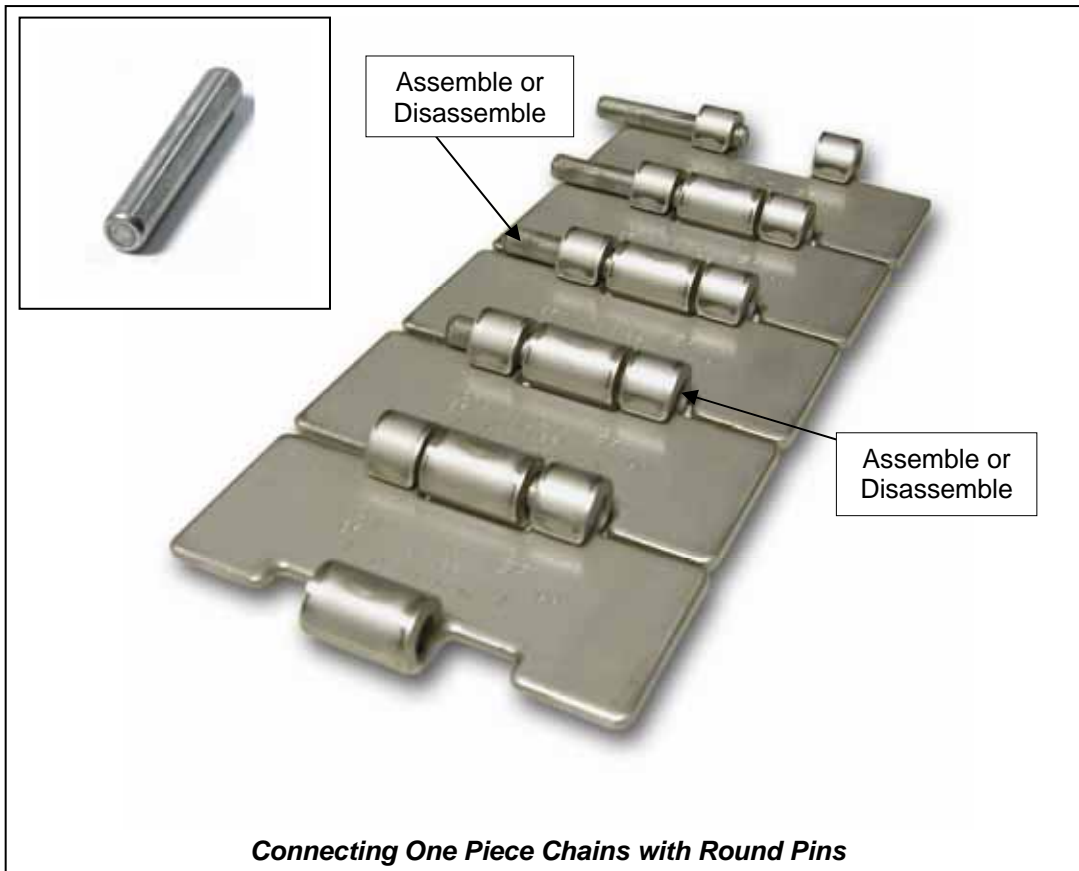
Installation / Disassembly – Chain

- **Connect the chain / One Piece Chains with Round Pins (812, 815 & 881)**

Tools required: drift pin and hammer



To connect each 10 ft (3.048 m) section, start by positioning the connecting pin into either one of the double eyes in the appropriate end link. Position the single eye of the other end link between the double eyes. Then drive pin through the single eye and into the adjacent double eye, using a drift punch and hammer, until connecting pin is centered in the link.



The chain should be hand tight when installed. Chain should never be over tensioned.

When installing the last section, separate the chain to required length using a drift punch and hammer to drive appropriate connecting pin out of chain. Make final connection to complete the chain loop.

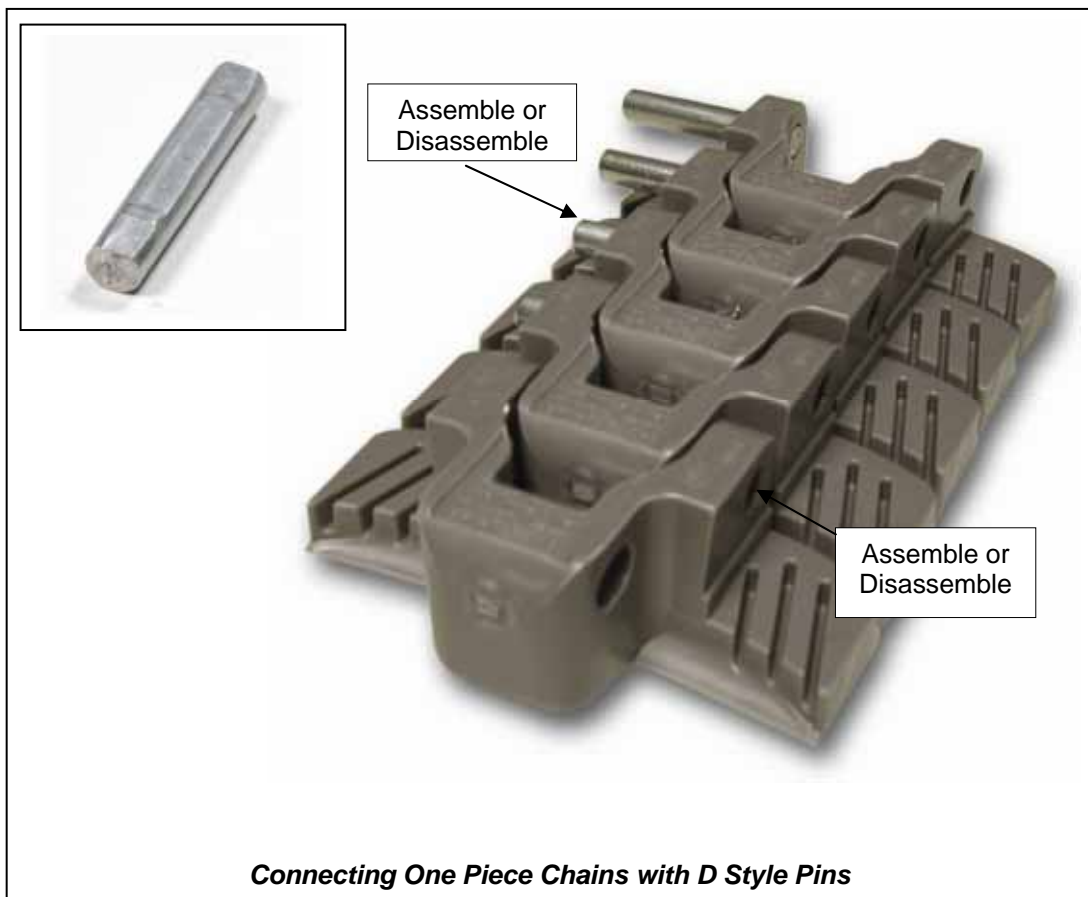


Installation / Disassembly – Chain

- **Connect the chain / One Piece Chains with D Style Pins (279, 770, 879, 880, 882, 1050 & 1055)**

Tools required: drift pin and hammer

✓ To connect each 10 ft (3.048 m) section, start by positioning the connecting pin into either one of the double eyes in the appropriate end link. Take care in positioning the flat of the pin to match up with the flat on the link hole. Position the single eye of the other end link between the double eyes. Then drive pin through the single eye and into the adjacent double eye, using a drift punch and hammer, until connecting pin is centered in the link.



The chain should be hand tight when installed. Chain should never be over tensioned.

When installing the last section, separate the chain to required length using a drift punch and hammer to drive appropriate connecting pin out of chain. Make final connection to complete the chain loop.

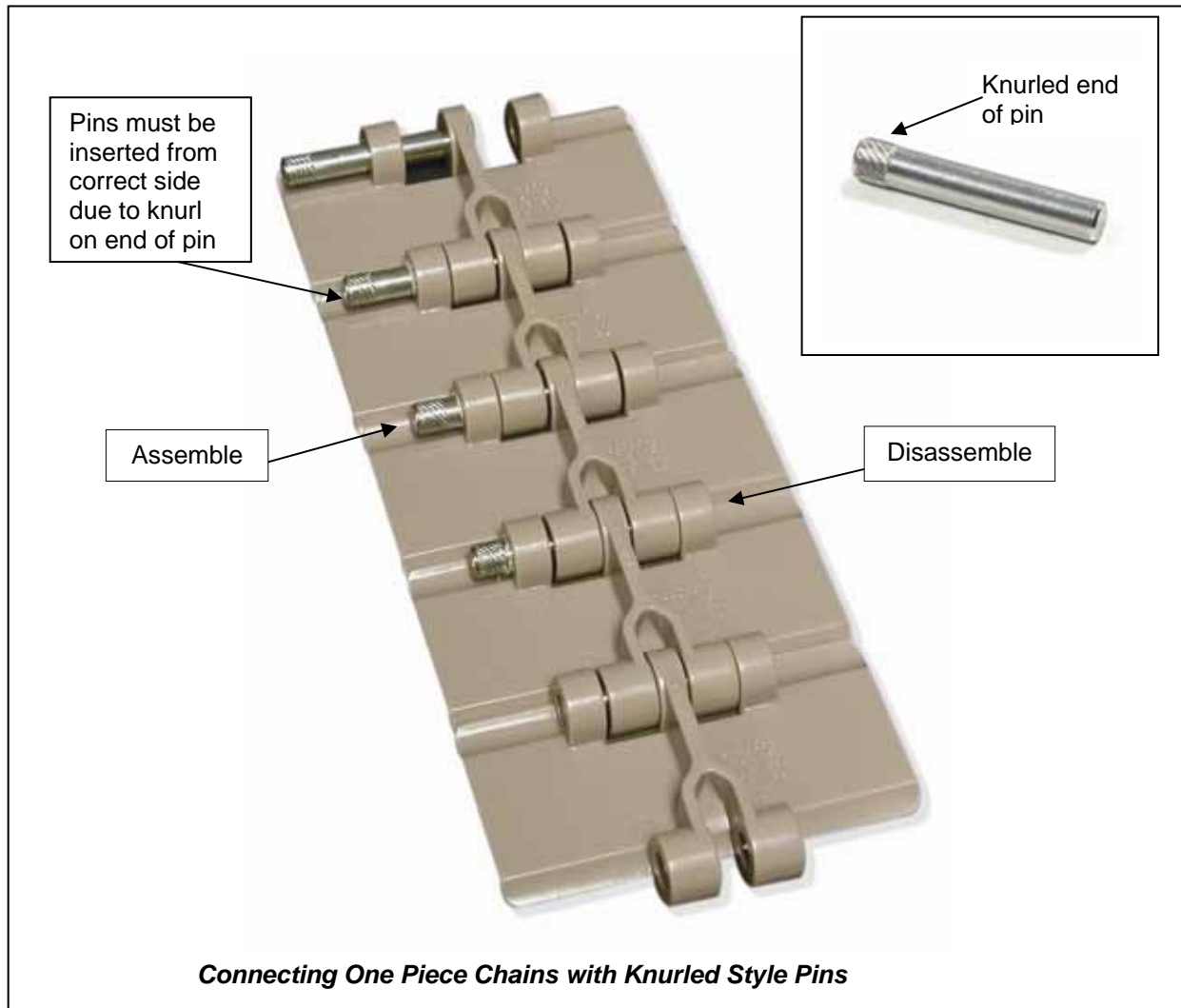


Installation / Disassembly – Chain

- **Connect the chain / One Piece Chains with Knurled Style Pins (820, 821, 831, 1700, 1701, 1702, 1755, 1757, 1765, 2500 & 2550)**

Tools required: drift pin and hammer

- ✓ To connect each 10 ft (3.048 m) section, start by positioning the connecting pin into the correct side of the chain (as shown below). Always insert smooth (un-knurled) end of pin first. Position the links together, then drive pin into the hinge using a drift punch and hammer, until connecting pin is recessed into the link like adjacent pins.



The chain should be hand tight when installed. Chain should never be over tensioned.

When installing the last section, separate the chain to required length using a drift punch and hammer to drive appropriate connecting pin out of chain. Make final connection to complete the chain loop.



Installation / Disassembly – Chain

- **Connect the chain / For Two Piece Chains (843, 845, 863, 866, 963, 1843, 1844, 1863, 1864, 1873, 1874, 1883, 3873, 4873 & 4874)**

Tools required: screw driver and chain breaker



Connect each 10 ft (3.048 m) section using the included connecting link. Position the male portion of the connecting link through the corresponding end roller links of the two sections which are being connected. Position the female portion of the connecting link over the male portion. Ensure that the connecting link “flats” (if applicable) are in the down position (away from the top plate). Snap the white top plate (if applicable) in place over the extended pin ends to secure the connecting link.



1 - Remove top plate



2 - Disassemble base chain



3 - Final Disassembly



Connecting link

MO
Connecting
Link

Connecting Two Piece Chains

** Connecting link styles may vary by chain series.



The chain should be hand tight when installed. Chain should never be over tensioned. To install the last section of chain, separate the chain to required length using a chain breaker to push the appropriate connecting pins out of the roller base chain. Make final connection to complete the chain loop.

For plastic two piece chains, white top plates are provided to aid in the location of the connecting links in assembled chain loops. The connecting link may contain a “flat” portion on the MO pin plate to aid in identification of the connecting link.

While 866 chain is a two piece design, it contains a cotter pin and therefore, cotter pins must be removed to disassemble the chain. This also means every link is a connecting link.



Start Up

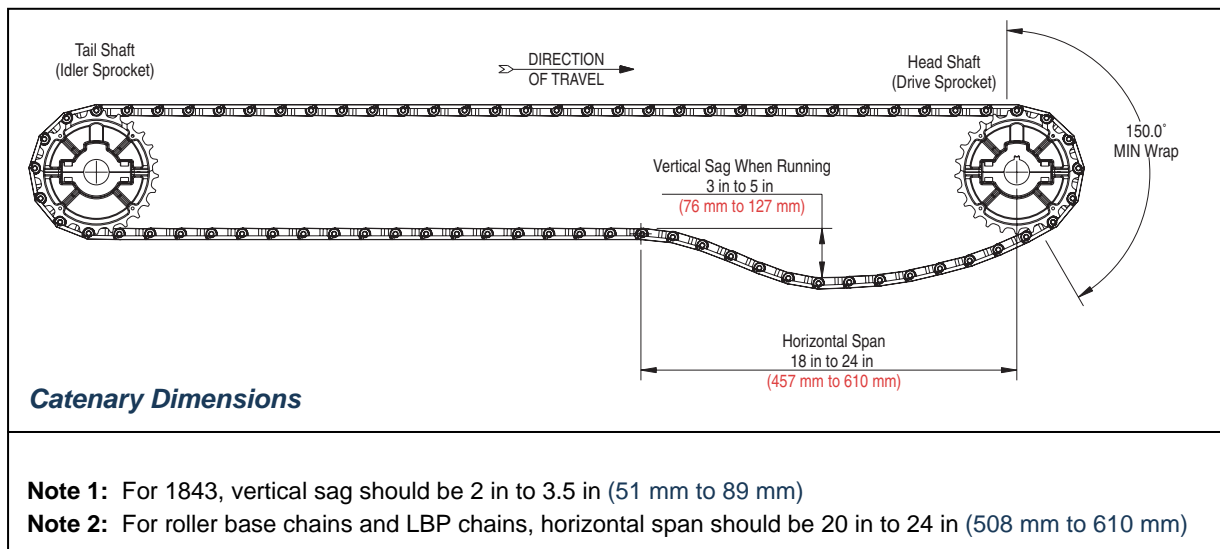
1. Start the conveyors and run **without** product for 30 minutes to 1 hour.

Listen for unusual noises such as clicking or banging and also look for signs of unusual operation. Refer to the Trouble Shooting Guide for possible corrections if unusual noises occur or the system is not running smoothly.

2. Repeat step 1 **with** product.
3. Check the catenary sag. When running, the catenary sag as shown below:

⇒ The function of the catenary is to allow a place for excess chain to accumulate

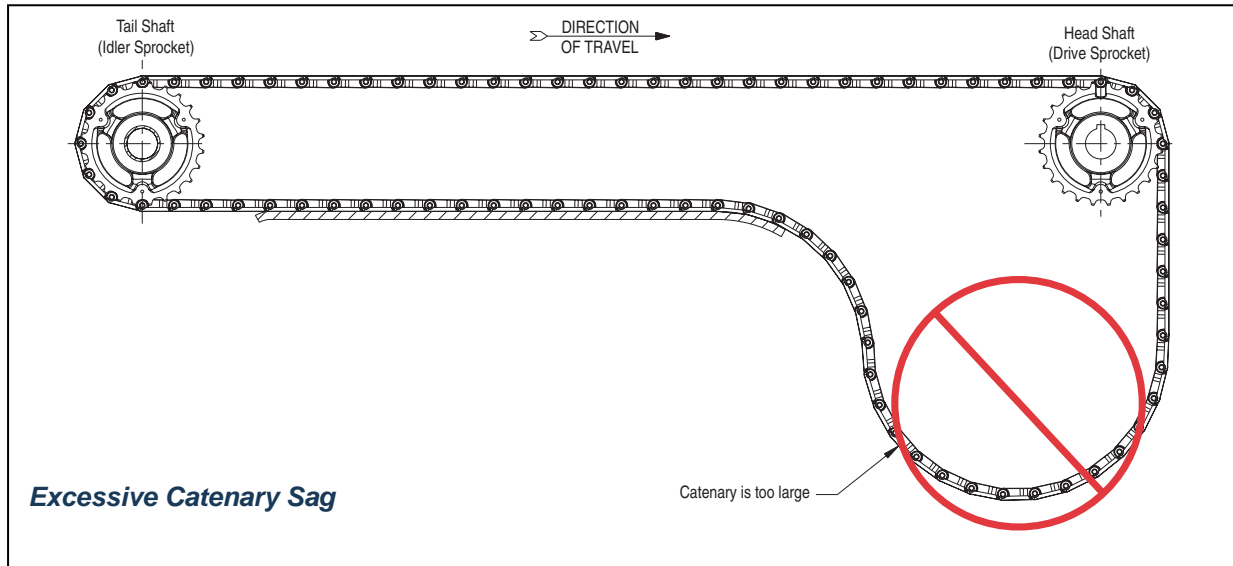
⇒ The catenary sag should be measured when running with product



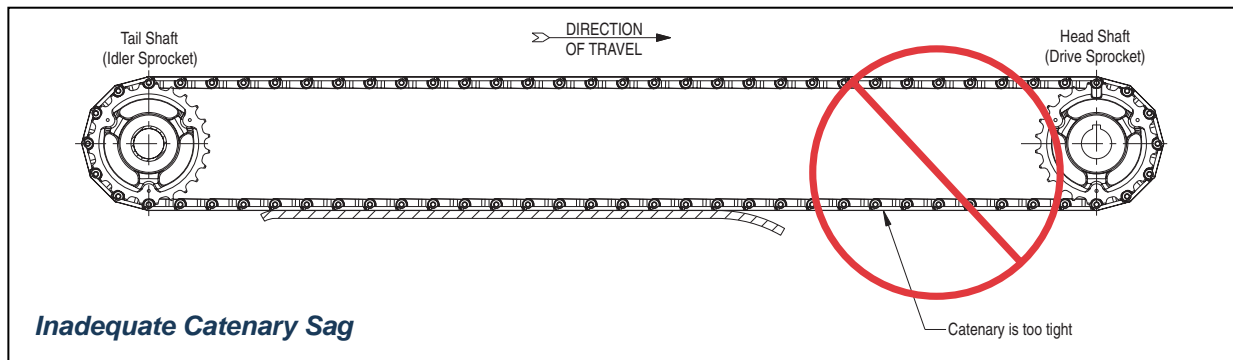
✓ For incline conveyors between 0 to 15 degrees the catenary should be allowed to form at the idle end of the conveyor. For larger angles, use a take-up to control the depth of the catenary. The depth should not exceed 6.00 in (150.0 mm).

Start Up

⇒ If the catenary sag is excessive or increases due to normal wear, it should be adjusted by removing links to obtain the proper sag



⇒ Table Top chains should never be run tight



Maintenance – Inspection

Table Top chains require very little maintenance. The following table provides suggested maintenance checks and the interval at which they should be performed. This assumes the conveyor runs three shifts per day, seven days per week. This is only a guideline. Each application and its environment may call for slightly different maintenance intervals.

Maintenance And Inspection Interval Guidelines				
Maintenance Item	Interval Between Checks			
			Semi-	Annually
Clean conveyor of debris if necessary	X			
Check catenary sag, adjust as necessary		X		
Check chain for unusual grooves or wear		X		
Check to make sure return rollers are spinning			X	
Measure chain elongation (see page 28 & 29)				X
Disconnect chain and check sprockets for wear				X

Replacement Guide

For optimum chain and sprocket performance, it is recommended that both the chain and sprockets be replaced at the same time. The wearstrips should also be replaced if worn, damaged or embedded with debris.

The chain should be replaced when any of the following occurs:

- The chain starts jumping the sprocket teeth
- The chain has “stretched” or “elongated” beyond the dimensions shown on next page



Replacement Guide

Replace chain when "X" # of links measures "Y" or larger

Chain Pitch		Chain Series	"X" # of Links or Top Plates	"Y" Maximum Allowable Chain Elongation	
in	mm			in	mm
1/2 or 0.50	13	7526	120	62.0	1575
19/32 or 0.59	15	1500	120	73.0	1854
3/4 or 0.75	19	5930, 6930, 8500	120	93.0	2362
1	25	(843, 845, 1843, 1844)* 1050, 1055, 770 2100, 7700, 7720	120	123.5	3137
1-1/4 or 1.25	32	7956	80	103.0	2616
1-1/2 or 1.50	38	279, 812, 815, 820, 821, 831, 866, 879, 880, 881, 882, 883, 1757 (863, 963, 1863, 1864, 1873, 1874, 3873, 4873, 4874)** 4700, 5700, 9600	80	123.5	3137
1-17/32 or 1.53	39	5960	80	126.0	3200
1-37/64 or 1.58	40	1755	80	130.5	3315
1-31/32 or 1.97	50	1700, 1701, 1702, 1765	60	122.0	3099
2	51	2010, 6080, (1883)***	60	123.5	3137
2-1/4 or 2.25	57	5990	50	116.0	2946
2-1/2 or 2.50	64	3000	50	129.0	3277
3	76	2500, 2550	40	123.5	3137

It is recommended to inspect and/or replace sprockets when the chain is replaced

**Two piece base chain (1/2 in) top plate is measured the same as 1 in pitch chain*

***Two piece base chain (3/4 in) top plate is measured the same as 1-1/2 in pitch chain*

****Two piece base chain (1 in) top plate is measured the same as 2 in pitch chain*

