140 MAINTENANCE

velocity) chain. The Hy-Vo chain is a rocker-joint type with a pin and rocker construction. Some of the special features of the Hy-Vo chain are its capacity to transmit much power at high speed, its resistance to heat seizure due to a construction which employs rolling rather than sliding friction, quiet operation even at high rpm, and low power loss.

Wear

A primary chain which has worn such that it is 1.4 % or more longer than when new is no longer safe for use and should be replaced. Split the crankcase. Leaving the transmission and crankshaft in place, inspect the wear by measuring the chain slack, and replace the chain if it has worn past the service limit. The replacement chain must be the Tsubakimoto Hy-Vo 3/8P-1W, 76-link chain.

Table 65 Primary Chain Play

Ser	vice Limit
32n	nm



When a new chain is installed, check the chain guides, and replace them with new ones if necessary. Transmission



Table 66 Primary Chain Guide Thickness (Upper, Lower)

Standard	Service Limit
6.0 mm	3.0 mm

NOTE: When installing new chain guides, apply a nonpermanent locking agent to the chain guide screws.

TRANSMISSION

The transmission is a 5-speed, constant mesh, return shift type. Its cross section is shown in Fig. 475, and the external shift mechanism is shown in Fig. 482. For simplicity, the drive shaft gears in the following explanation are referred to as "D" (e.g., D1=drive shaft 1st gear) and the output shaft gears as "0"

Gears D3, 04, and 05 are all splined to, and thus rotate with their shafts. During gear changes, these gears are moved sideways on their shafts by the 3 shift forks, one for each gear. Gears D4, D5, 01, 02, and 03 rotate free of shaft rotation, but cannot move sideways Gears D1 and D2 rotate with the shaft and are unable to move sideways.

