GREAT PLAINS NO-TILL GRASS DRILL Model 705

Setting the No-Till Drill for Native Warm Season Grasses/Forbs

First – Determine the Seeding Rate per Acre to set the drill to plant. This is <u>not</u> the Pure Live Seed (PLS) per acre rate; it is the <u>BULK rate</u> of seed per acre. To figure the bulk rate you will need to look at the bag(s) of seed or, the purchase order in some cases, to find the bulk weight of the product/seed you received (including forbs/wildflowers seed). Divide this number of bulk pounds by the area (# of acres to be planted) to determine the bulk rate (amount) of seed per acre to set the drill at.

Next – Find this Bulk Rate on the Native Grass Rates Chart (located inside the middle seed box lid). There are only two rows on this chart that you need to concern yourself with; the 5th and 6th rows, labeled **705**, **8 & 7.5 inch**. Within these two rows you should find a number that closely matches your bulk rate per acre. From this number you will find the settings/sprockets to set the drill.

Sprocket settings – The two choices along the left side of the chart for the Clutch Shaft Sprocket & Upper Shaft Sprocket are 12/35 or 12/30. These sprockets can be located (looking at the drill from the hitch end) near the right end of the shaft below the grasses seed box. You will need to count the teeth to determine what sprockets are in use and/or to change to the other combination of sprockets.

The Drive & Driven sprocket selection is given at the top of the column (of your bulk rate #). These two sprockets are found inside the cover located on the right side of the drill (looking from the hitch). One is labeled drive and the other is labeled driven. Install the required sprockets to match those listed on the chart.

NOTE: It is much easier to change the drive/driven sprockets than it is to change the clutch/upper shaft sprockets. Thus, if the drill's clutch/upper shafts are already at 12 & 30 and, you can find a bulk rate on the chart that closely matches this row (within 0.3 pounds), then leave these alone and simply adjust the drive/driven sprockets to match your bulk rate. The drive/driven are easier to change. And, the same holds if the clutch/upper shafts are already at 12 & 35; look for a rate that closely matches your need and adjust with the drive/driven if necessary. If you cannot find a close match then you will need to adjust/change both pair of sprocket sets.

Depth setting – The depth is adjusted hydraulically. First, remove the transport safety pin and depth stop rings (if all of them are one cylinder ram, i.e., all are on one side). With the drill hitched and safety chains fastened to the tractor and, hoses connected to the tractor's hydraulic system, let the drill down until the front disc/cutters are cutting a slot about

1/4" deep in the soil. Then insert the appropriate depth stops on the hydraulic ram; this should insure you would maintain the same depth setting throughout the planting. When you complete a row you will need to raise the drill before turning; after turning you will lower the ram until it comes down/returns to the depth stops.

Press wheels setting – Looking at the rear of the drill you will see the rubber-covered press wheels. Pull the T-handle up and then slide it to make adjustment. All of these should be set all the way forward with no open holes (left and right) or, with no holes open on one side and only one open (to the front) on the other side. You should not need to exceed these two choices.

Planting – First, pull the T-handle on the wheel-hub out slightly and turn ¼ turn to a slot which will engage the drill for planting. Then, with seed in the seed box and the drill lowered to depth, plant about 100', stop and, check that the seed is not be planted more than a ¼" deep – it is better to have some seed (30%) exposed on the soil surface than to have it planted too deep! If it's not, adjust your depth setting (depth stops) accordingly. Also, check to be sure all seed tubes are clear of obstructions (cob webs inside, mud build-up on outside) and that seed is coming out.

NOTE: Include your forbs/wildflower seeds in the seed box along with the WSG seed. Forbs/Wildflower seeds will tend to fall to the bottom of the seed box resulting in a higher population of flowers in the initial/beginning passes. Thus, if you begin planting along the roadside edge of a field then more wildflowers will be seen from the road. If you want a more even distribution of flowers throughout the planting then add a proportionate amount of seed from time-to-time as you plant.

When finished – Empty the seed box; seed left in the box can settle and pack, which is hard on drive chains when planting is resumed. It is unlikely you will ever run the seed box completely empty; this is simply inherent with drilling these light fluffy seeds that, generally, some seed may remain.

Return the drill to its fully-raised position and re-insert the travel-stop to prevent the drilling from inadvertently/accidentally coming into contact with the road surface.

And, return the wheel-hub T-handle to its neutral position (pull out and turn about ¼ turn to its original position); if not, the drill will continue engaged in the planting mode and you will be racking-up acres on the planting meter; and, may cause damage to the drill.

And lastly, remove/clean any mud buildup and debris that could fall off in transport and damage other vehicles or the drill.