

Update Instructions



706/1006NT, 605NT, 3P605NT,
3P500/3P500V, 3P600

Calibration Crank Kit

Used with:

- 706 End Wheel No-Till
- 1006 End Wheel No-Till
- 605NT
- 3P605NT
- 3P500/3P500V
- 3P600



When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

General Information

These instructions explain how to install the calibration crank kit. This kit uses a crank handle for calibration. This allows for calibration in the field.

These instructions apply to:

152-300A	706/1006NT Calibration Kit
152-301A	605NT Calibration Kit
152-303A	3P605NT Calibration Kit
152-305A	3P600 Calibration Kit
152-306A	3P500/3P500V Calibration Kit

Manual Update

Refer to the 706/1006NT, 605NT, 3P605NT, 3P500/3P500V, or 3P600 operator's manual and seed rate book for detailed information on safely operating, adjusting, troubleshooting and maintaining the calibration crank. Refer to the parts manual for part identification. A copy of the updated parts manual is available through

your Great Plains dealer.

150-285M	706/1006NT Operator's Manual
150-285P	706/1006NT Parts Manual
151-061M	605NT/3P605NT Operator's Manual
151-061P	605NT/3P605NT Parts Manual
118-794M	3P500/3P500V/3P600 Operator's Manual
118-794P	3P500/3P500V/3P600 Parts Manual

Before You Start

Page 3 is a detailed listing of parts included in the Calibration Crank Kit update. Use this list to inventory parts received.

Tools Required

- Basic Hand Tools
- Welder
- DA Grinder

706/1006NT 152-300A Assembly Instructions

Install Calibration Handle Stob

Refer to Figure 1

1. Choose a location on frame of drill to weld the calibration handle stob.

NOTE: Be sure to choose an out of the way location as the calibration handle stob stores the calibration crank when it is not in use.

2. Grind paint at location on frame where calibration handle stob is to be welded.
3. Weld calibration handle stob on frame.
4. Repaint portion of frame.



Figure 1

Calibration Crank on Storage Stob

2 Calibration Crank Kit

Assemble Calibration Crank and Coupler

Refer to Figure 2

1. Place black vinyl hand grip over calibration crank handle.
2. Secure calibration crank to storage stob with retaining pin.
3. Remove washer and roll pin from jackshaft. Attach coupler to jackshaft and secure with roll pin. Discard washer.

NOTE: Coupler should remain on jackshaft. Do not remove coupler even after calibration.

Calibrate

Refer to Figure 3

1. Attach calibration crank to 706/1006NT gauge wheel jackshaft. Disengage lockout on the drive wheel. NOTE: If unit has native grass an extra calibration coupler is needed on the right hand gauge wheel. This can be ordered thru your Great Plains Dealer.
2. Rotate calibration crank to see that feed cups and drive are working properly and are free from foreign matter.
3. To adjust seeding rate, decide which drive type (gearbox) setting you need from the seeding charts. Set the gear box. Rotate calibration crank a few turns to confirm gearbox has been engaged.
4. Record weight of an empty container large enough to hold seed metered for one acre.
5. Turn calibration crank several times to fill seed cups with seed. Turn crank until seed falls to the ground from each cup.
6. Rotate gauge wheel jackshaft using calibration crank about 595 rotations for the 706 and 411 rotations for the 1006. This is equal to one acre.
7. Check that the three seed cups have plenty of seed coming into them.
8. Weigh metered seed. Subtract initial weight of container. Divide by three. Multiply by the number of openers on your drill to determine total pounds seeded per acre. If this figure is different than desired, set your seed rate adjustment handle accordingly.

NOTE: You may want to repeat the calibration procedure if your results vary greatly from the seed rate chart.

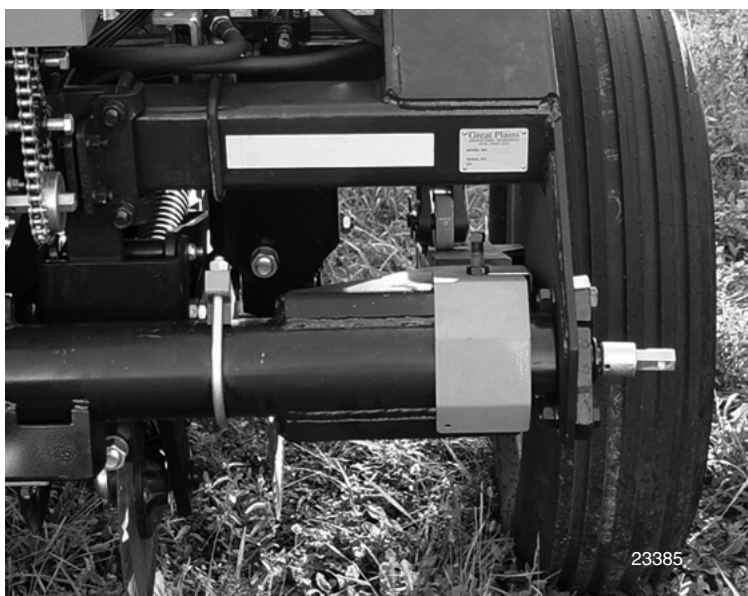


Figure 2

Calibration Crank Assembly



Figure 3

Calibrate with Calibration Crank

Equations for calibrating seed rate:

$$\frac{\text{measured seed} - \text{empty container}}{3 (\text{number of seed cups measured})} = \text{pounds per seed cup}$$

$$\text{pounds per seed cup} \times \text{number of openers} = \text{pounds per acre}$$

605NT 152-301A Assembly Instructions

Install Calibration Handle Stob

Refer to Figure 1

1. Choose a location on frame of drill to weld the calibration handle stob.

NOTE: Be sure to choose an out of the way location as the calibration handle stob stores the calibration crank when it is not in use.

2. Grind paint at location on frame where calibration handle stob is to be welded.
3. Weld calibration handle stob on frame.
4. Repaint portion of frame.

Assemble Calibration Crank

1. Place vinyl hand grip over calibration crank handle.

Replace Jackshaft

Refer to Figure 2

1. Loosen and remove 5/16-18 x 3/8 set screws from lock collars on both sides of left hand side gauge wheel drive assembly.
2. Remove lock collar from outside of left hand side gauge wheel drive assembly.
3. Unclip and remove chain from chain sprocket and jaw clutch located on inside of left hand side gauge wheel drive assembly.
4. Remove jaw clutch and sprocket assembly from gauge wheel jackshaft. Remove lock collar.
5. Holding on to center sprocket, replace gauge wheel jackshaft with new gauge wheel jackshaft from kit.
6. Replace jaw clutch and sprocket assembly on new jackshaft. Reattach chain to sprocket. Add lock collars and tighten.



Figure 1
Calibration Crank on Storage Stob



Figure 2
Jackshaft

Calibrate

Refer to Figure 2

1. To adjust seeding rate, decide which drive type (gearbox) setting you need from the seeding charts. Set the gearbox.
2. Record weight of an empty container large enough to hold seed metered for one acre.
3. Place several pounds of seed over three seed cups on an outside end of drill box. Pull seed tubes off of these three openers.
4. Attach calibration crank to gauge wheel jackshaft and secure with retaining pin. Disengage lockout on the drive wheel. Rotate crank a few turns to confirm clutch and gearbox are engaged.
5. Rotate calibration crank to see that feed cups and drive are working properly and are free from foreign matter.
6. Turn crank several times to fill seed cups with seed. Rotate crank until seed falls to the ground from each cup.
7. Turn crank 935 rotations. This is equal to one acre.
8. Check that the three seed cups have plenty of seed coming into them.
9. Weigh metered seed. Subtract initial weight of container. Divide by three. Multiply by the number of openers on your drill to determine total pounds seeded per acre. If this figure is different than desired, set your seed rate adjustment handle accordingly.

NOTE: You may want to repeat the calibration procedure if your results vary greatly from seed rate chart.



Figure 3
Calibrate

Equations for calibrating seed rate:

$$\frac{\text{measured seed} - \text{empty container}}{3 \text{ (number of seed cups measured)}} = \text{pounds per seed cup}$$

$$\text{pounds per seed cup} \times \text{number of openers} = \text{pounds per acre}$$

3P605NT 152-303A Assembly Instructions

Install Calibration Handle Stob

Refer to Figure 1

1. Choose a location on frame of drill to weld the calibration handle stob.

NOTE: Be sure to choose an out of the way location as the calibration handle stob stores the calibration crank when it is not in use.

2. Grind paint at location on frame where calibration handle stob is to be welded.
3. Weld calibration handle stob on frame.
4. Repaint portion of frame.

Assemble Calibration Crank

1. Place vinyl hand grip over calibration crank handle.

Replace Jackshaft

NOTE: If the 3P605NT is not equipped with weight brackets, replace the jackshaft according to the steps below.

If the 3P605NT is equipped with weight brackets, replace the jackshaft according to the steps listed under Replace Jackshaft (with Weight Brackets).

Refer to Figure 2

1. Unscrew acrometer from jackshaft.
2. Detach chain from sprocket on far right end of upper jackshaft. Remove sprocket from jackshaft.
3. Detach chain from sprocket on far left end of upper jackshaft. Remove sprocket from jackshaft by pulling jackshaft from drive assembly.
4. Replace upper jackshaft with new jackshaft provided in kit. Reattach all sprockets and chains to assembly.

Replace Jackshaft (with Weight Brackets)

Refer to Figure 3

1. Unscrew acrometer from jackshaft.
2. Detach chain from sprocket on far left end of upper jackshaft. Remove sprocket from jackshaft.
3. Detach chain from sprocket on far right end of upper jackshaft. Remove sprocket from jackshaft by pulling jackshaft from drive assembly.
4. Replace upper jackshaft with new jackshaft provided in kit. Reattach all sprockets and chains to assembly.

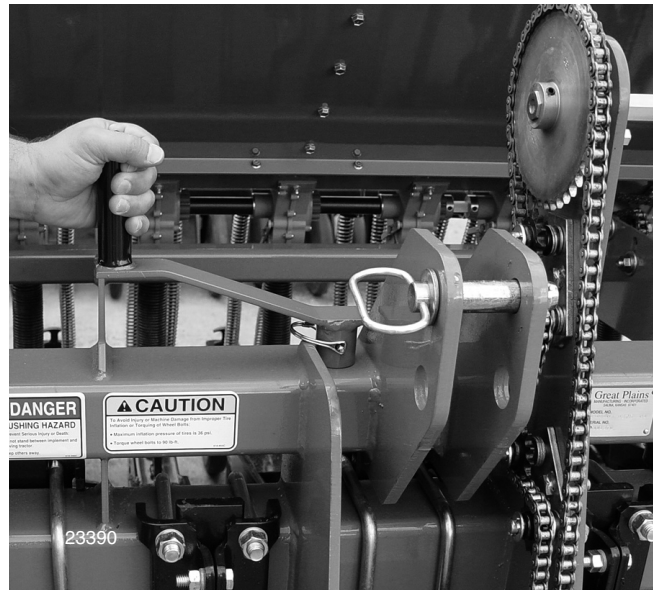


Figure 1

Calibration Crank on Storage Stob



Figure 2

Calibration Crank Location without Weight Brackets

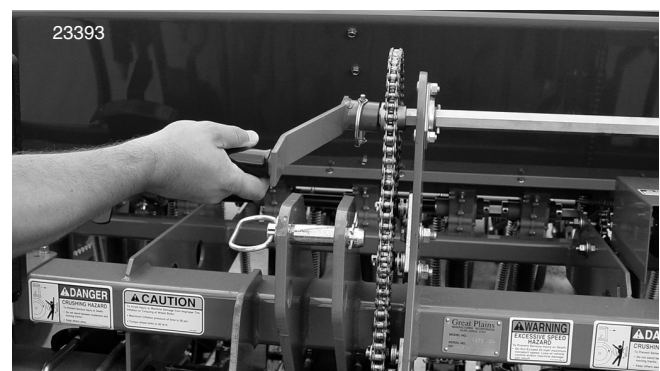


Figure 3

Calibration Crank Location with Weight Brackets

Calibrate

Refer to Figure 4

1. To adjust seeding rate, decide which drive type (gearbox) setting you need from the seeding charts. Set the gearbox.
2. Record weight of an empty container large enough to hold seed metered for one acre.
3. Place several pounds of seed over three seed cups on an outside end of drill box. Pull seed tubes off of these three openers.
4. Attach calibration crank to upper jackshaft and secure with retaining pin. Rotate crank a few turns to confirm gearbox has engaged.
5. Rotate calibration crank to see that feed cups and drive are working properly and are free from foreign matter.
6. Turn crank several times to fill seed cups with seed. Rotate crank until seed falls to the ground from each cup.
7. For this shaft location, turn crank 913 rotations. This will equal the amount of revolutions in one acre.
8. Check that the three seed cups have plenty of seed coming into them.
9. Weigh metered seed. Subtract initial weight of container. Divide by three. Multiply by the number of openers on your drill to determine total pounds seeded per acre. If this figure is different than desired, set your seed rate adjustment handle accordingly.

NOTE: You may want to repeat the calibration procedure if your results vary greatly from seed rate chart.



Figure 4
Calibrate

Equations for calibrating seed rate:

$$\frac{\text{measured seed} - \text{empty container}}{3 \text{ (number of seed cups measured)}} = \text{pounds per seed cup}$$

$$\text{pounds per seed cup} \times \text{number of openers} = \text{pounds per acre}$$

3P600/3P500/3P500V 152-305A & 152-306A Assembly Instructions

Install Calibration Handle Stob

Refer to Figure 1

1. Choose a location on frame of drill to weld the calibration handle stob.

NOTE: Be sure to choose an out of the way location as the calibration handle stob stores the calibration crank when it is not in use.

2. Grind paint at location on frame where calibration handle stob is to be welded.
3. Weld calibration handle stob on frame.
4. Repaint portion of frame.

Assemble Calibration Crank

1. Place vinyl hand grip over calibration crank handle.

Replace Jackshaft

Refer to Figure 2

1. Unscrew acrometer from jackshaft.
2. Detach chain from sprocket on far right end of upper jackshaft. Remove sprocket from jackshaft.
3. Detach chain from sprocket on far left end of upper jackshaft. Remove sprocket from jackshaft by pulling jackshaft from drive assembly.
4. Replace upper jackshaft with new jackshaft provided in kit. Reattach all sprockets and chains to assembly.

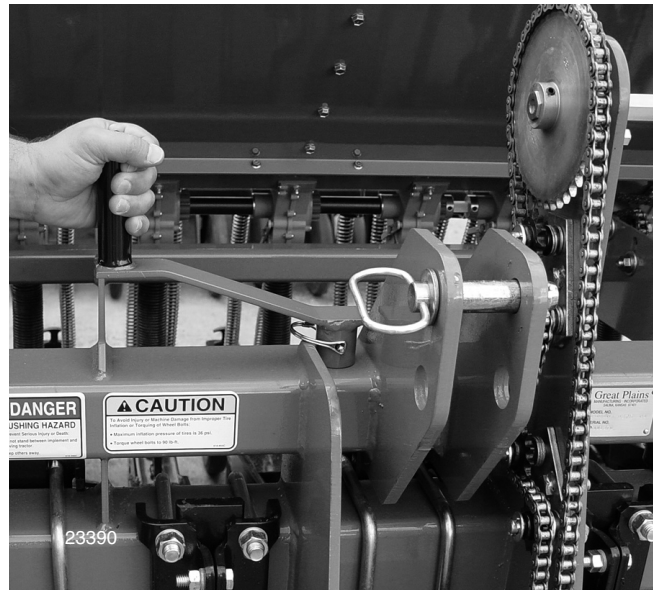


Figure 1

Calibration Crank on Storage Stob

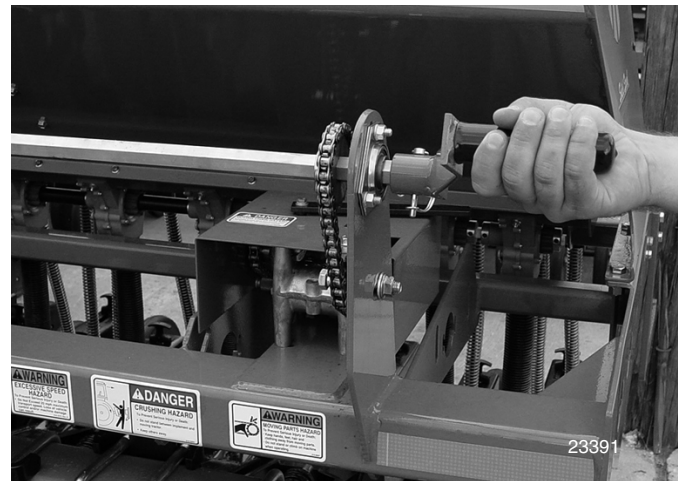


Figure 2

Calibration Crank Location (Outside)

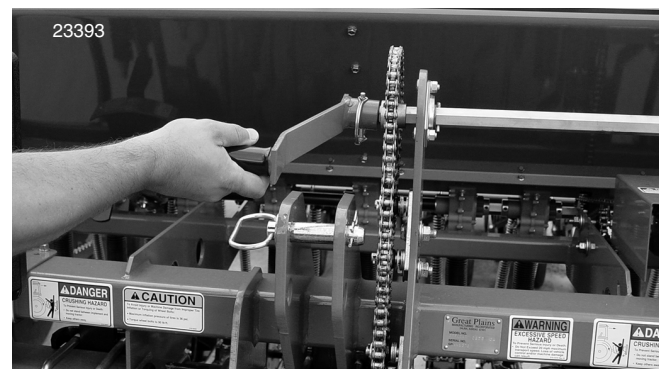


Figure 3

Calibration Crank Location (Inside)

Calibrate

Refer to Figure 4

1. To adjust seeding rate, decide which drive type (gearbox) setting you need from the seeding charts. Set the gearbox.
2. Record weight of an empty container large enough to hold seed metered for one acre.
3. Place several pounds of seed over three seed cups on an outside end of drill box. Pull seed tubes off of these three openers.
4. Attach calibration crank to gauge wheel jack-shaft and secure with retaining pin. Disengage lockout on the drive wheel. Rotate crank a few turns to confirm gearbox has engaged.
5. Rotate calibration crank to see that feed cups and drive are working properly and are free from foreign matter.
6. Turn crank several times to fill seed cups with seed. Rotate crank until seed falls to the ground from each cup.
7. For this shaft location, turn crank 982 rotations for the 3P500 and 3P500V. Turn crank 786 rotations for 3P600. This will equal the amount of revolutions in one acre.
8. Check that the three seed cups have plenty of seed coming into them.
9. Weigh metered seed. Subtract initial weight of container. Divide by three. Multiply by the number of openers on your drill to determine total pounds seeded per acre. If this figure is different than desired, set your seed rate adjustment handle accordingly.

NOTE: You may want to repeat the calibration procedure if your results vary greatly from seed rate chart.

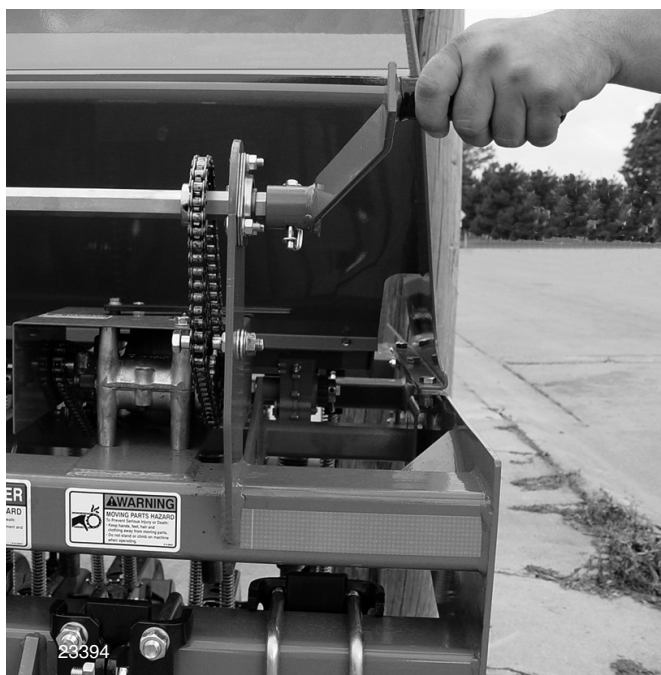


Figure 4
Calibrate

Equations for calibrating seed rate:

$$\frac{\text{measured seed} - \text{empty container}}{3 \text{ (number of seed cups measured)}} = \text{pounds per seed cup}$$

$$\text{pounds per seed cup} \times \text{number of openers} = \text{pounds per acre}$$

152-300A 706/1006NT CALIBRATION KIT

Your kit includes:

Qty.	Part No.	Part Description
1	148-654D	CALIBRATION HANDLE STOB
1	175-235H	CALIBRATION CRANK WELDMENT
1	805-065C	PIN WIRE RETAINING 1/4 X 1
1	812-335C	CALIBRATION CRANK COUPLER
1	817-632C	GRIP HANDLE VNYL 1.0 ID X 4.5
1	152-302M	MANUAL CALIBRATION CRANK

152-301A 605NT CALIBRATION KIT

Your kit includes:

Qty.	Part No.	Part Description
1	148-654D	CALIBRATION HANDLE STOB
1	152-556D	605NT GW JACKSHAFT
1	175-235H	CALIBRATION CRANK WELDMENT
1	805-065C	PIN WIRE RETAINING 1/4 X 1
1	817-632C	GRIP HANDLE VNYL 1.0 ID X 4.5
1	152-302M	MANUAL CALIBRATION CRANK

10 Calibration Crank Kit**152-303A 3P605NT CALIBRATION KIT**

Your kit includes:

Qty.	Part No.	Part Description
1	148-654D	CALIBRATION HANDLE STOB
1	152-557D	3P605NT UPPER JACKSHAFT
1	175-235H	CALIBRATION CRANK WELDMENT
1	805-065C	PIN WIRE RETAINING 1/4 X 1
1	817-632C	GRIP HANDLE VNYL 1.0 ID X 4.5
1	152-302M	MANUAL CALIBRATION CRANK

152-305A 3P600 CALIBRATION KIT

Your kit includes:

Qty.	Part No.	Part Description
1	148-654D	CALIBRATION HANDLE STOB
1	152-304H	3PT CONV CALIBRATION HANDLE
1	152-558D	3PT CONVENTIONAL JACKSHAFT
1	805-065C	PIN WIRE RETAINING 1/4 X 1
1	817-632C	GRIP HANDLE VNYL 1.0 ID X 4.5
1	152-302M	MANUAL CALIBRATION CRANK

152-306A 3P500/3P500V CALIBRATION KIT

Your kit includes:

Qty.	Part No.	Part Description
1	148-654D	CALIBRATION HANDLE STOB
1	152-558D	3PT CONVENTIONAL JACKSHAFT
1	175-235H	CALIBRATION CRANK WELDMENT
1	805-065C	PIN WIRE RETAINING 1/4 X 1
1	817-632C	GRIP HANDLE VNYL 1.0 ID X 4.5
1	152-302M	MANUAL CALIBRATION CRANK