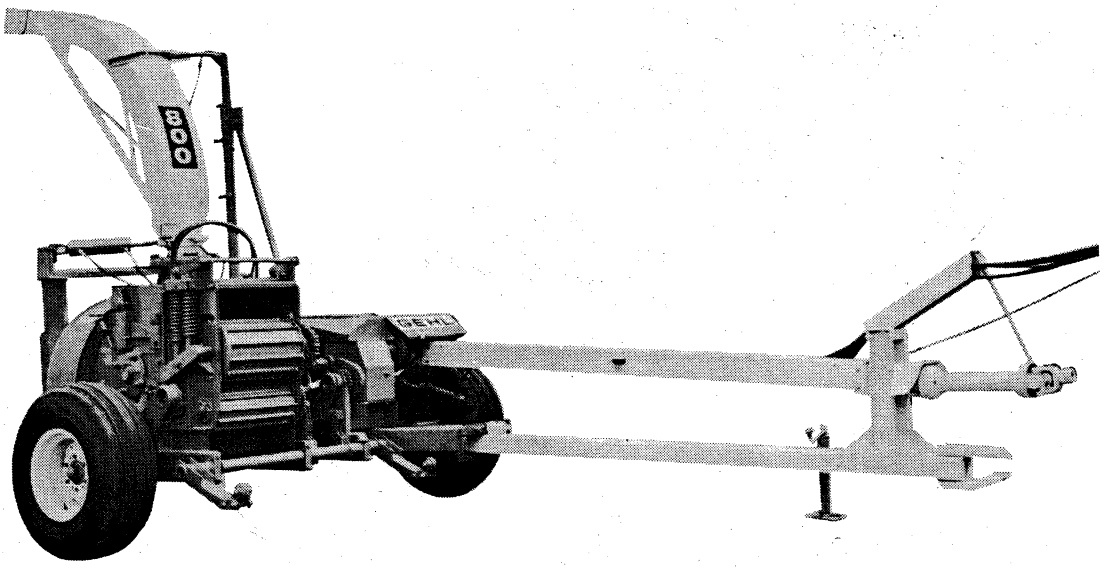
CB 800

Forage Harvester



OPERATOR'S MANUAL

Form No.
902207
Replaces
901907

GEHL® COMPANY

OPERATION

START-UP

BE SURE that all Shields are in place and tightened down before starting the Harvester. Engage the tractor PTO with the tractor at Idle Speed. Shift the Feed Roll Transmission into Forward and Reverse several times to make sure that it is functioning correctly and to familiarize yourself with its operation. Move the Deflector back and forth and the Cap up and down to make sure that they also function properly.

NEVER engage the tractor PTO or engage the Feed Roll Transmission with the tractor running faster than Idle Speed. Engaging the PTO at a higher speed may damage the Drive Line components.

Raise and lower the Attachment several times to make sure that it moves freely and to the desired position.

NOTE: Tractor PTO RPM should be maintained at or above 1000 RPM when entering or leaving the crop to prevent the Blower from plugging with chopped forage.

ENTERING CROP

The PTO RPM should be at 1000 RPM before entering the crop and maintained at or above 1000 RPM while harvesting. To maintain 1000 RPM, run the tractor engine at or above the RPM shown on the Engine Tachometer for a 1000 RPM PTO speed.

LEAVING CROP

The PTO RPM should be maintained at 1000 RPM before the PTO is disengaged at the end of a row or when the wagon is full to make sure the Feed Rolls and Blower are cleaned out. When forage stops coming out of the Deflector, the PTO can be disengaged.

EMERGENCY SHUT-DOWN

IN AN EMERGENCY or in case a foreign object enters or becomes lodged inside the Feed Rolls or Cutting Cylinder, **STOP** the Harvester **IMMEDIATELY** by disengaging the PTO.

UNPLUGGING

WARNING: When any part of Harvester becomes plugged, shut tractor off. Remove Drive from tractor PTO shaft and BE SURE all movement has stopped BEFORE proceeding.

NOTE: Check and replace the Main Drive Shear Bolts as required. BE SURE to grease Shear Flange any time the Joint Shears.

NOTE: The CB800 is furnished with a single Float Spring which enables proper Lift Float adjustment for the CA670, HA1000 and TR3038 attachments. The MA900, SH600, TR330 and TR338 attachments require installation of an Auxiliary Lift Spring. Refer to appropriate attachment Operator's Manuals for mounting and adjustment details.

Lift Rollers (Figs. 15 & 16)

The CB800 Harvester is furnished with the Lift Rollers positioned as shown in the photograph ("up" position). The Rollers **MUST** be in the "up" position for mounting all attachments except the 3-Row Corn attachments. For 3-Row attachments, adjust both Lift Rollers to the "down" position as shown in the drawing.

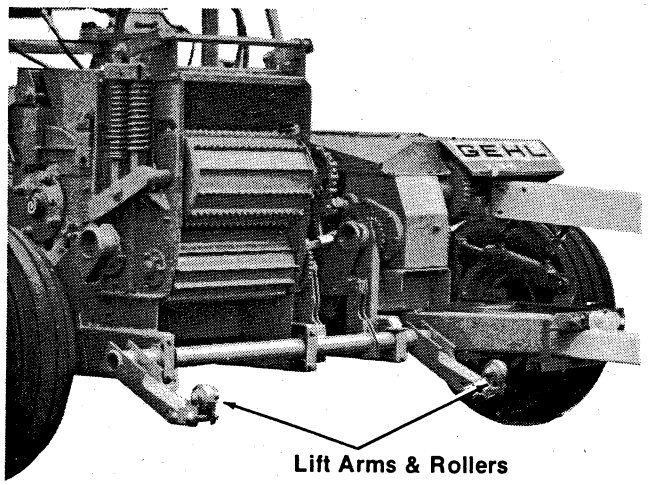


Fig. 15: Lift Rollers in "Up" Positions

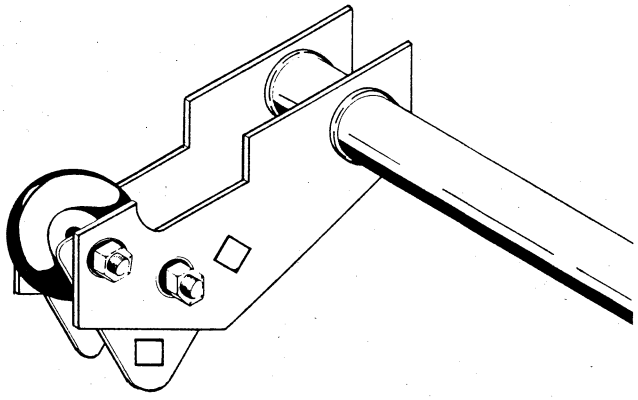


Fig. 16: Lift Roller in "Down" Position

LENGTH-OF-CUT (Figs. 17 & 18)

The Length-of-Cut is changed by placing different Gear sets on the Splined Shafts on the left side of the Feed Roll Transmission and/or by removing Knives from the Cutting Cylinder. The Length-of-Cut information illustrated here is also provided on a Decal mounted on the Harvester.

The 22 Tooth Gear and the 26 Tooth Gear Set is furnished installed on the Harvester Feed Roll Transmission. The 20 tooth Gear and the 28 Tooth Gear Set is furnished in the Tool Box. An optional 34 Tooth Gear and 14 Tooth Gear Set is also available for a longer Length-of-Cut only.

NOTE: Optional 34 and 14 Tooth Gear Set MUST NOT be used for short Length-of-Cut applications because the slow Feed Roll speed will overload the Harvester and the Attachment.

Select the proper set of Length-of-Cut Gears and mount them on the Transmission making sure that they line up properly; use the Shim Washers provided for alignment.

The Cutting Cylinder has eight Knives. Appropriate Knives can be removed to obtain the longer cut length listed in the chart. **BE SURE** to install Counterbalance weights when only one Knife is used in the Cylinder. Refer to details packaged with the kit for installation.

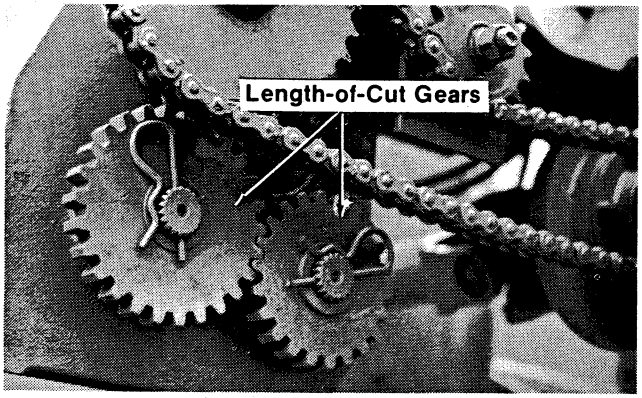


Fig. 17

CB800
LENGTH OF CUT — INCHES — (M.M.)

FWD GEAR	REAR GEAR	KNIVES 8	4	2	1
20	28	3/16 (4.8)	3/8 (9.6)	3/4 (19)	1 1/2 (38.1)
22	26	1/4 (6.4)	1/2 (12.7)	1 (25.4)	2 (50.8)
26	22	5/16 (7.9)	5/8 (15.9)	1 1/4 (31.8)	2 1/2 (63.5)
28	20	3/8 (9.6)	3/4 (19)	1 1/2 (38.1)	3 (76.2)
34*	14*	5/8 (15.9)	1 1/4 (31.8)	2 1/2 (63.5)	5 (127)

*ACCESSORY ITEMS

060282

Fig. 18: Length-of-Cut Chart

NOTE: The Clutch Hub is generally very tightly locked-onto the Shaft. To aid in Hub removal, it may be necessary to pound on the end of the Shaft with a lead or plastic ended hammer.

After the Hub is removed from the Shaft, remove the Woodruff Key and slide the Clutch Housing off of the Shaft.

Replacement

Begin Clutch replacement by first sliding the Clutch Housing onto the Drive Shaft and then installing the Woodruff Key. Then, turn the set screw down flush with the inside of the Clutch Hub. Install the Pin, Spring and Clutch Dog into the Clutch Hub. Then, slide the Clutch Hub onto the Drive Shaft over the Key. **BE SURE** that, when the Clutch Hub is installed, the Clutch is properly oriented so that it will overrun in the direction of rotation as the Clutch Housing is turned with the Shaft held stationary.

Drive the Clutch Hub onto the Shaft to a predetermined point of 1-1/4" measured from the end of the Shaft to the rear of the Clutch Hub. At this point then, the set screw should line up with the countersunk hole in the Shaft. Rotate the Clutch Housing as required to line up the hole in the Clutch Housing with the set screw in the Clutch Hub. Tapping the Clutch Hub while applying pressure on the Allen Wrench will help get the set screw started into the countersunk hole and tightly secured. Replace the Pipe Plug to complete the procedure.

CYLINDER OVERRUNNING CLUTCH

Removal

After the Bevel Gear Drive Transmission has been removed from the Harvester Frame, the Cylinder Drive Overrunning Clutch can be disassembled by removing the (6) 5/16" bolts which attach the Cylinder Drive Joint to the Clutch Cover. After removing bolts, slide the Drive Joint off of the Shaft and remove the Clutch Drive Hub and Clutch Hub. Using a Snap-ring Pliers, remove the Rotating Ring which secures the Clutch Cover and Transmission Drive Sprocket. Remove the Clutch Cover and Sprocket from the Shaft.

Replacement

To reassemble the Cylinder Drive Overrunning Clutch, slide the Transmission Drive Sprocket onto the splined Shaft with the welded Hub toward the Transmission Housing. Place the Clutch Cover onto the Shaft next to the Drive Sprocket and insert the Retaining Ring into the groove in the Shaft to secure the Cover and Sprocket in place. Place the Clutch Hub, with Clutch Spring and Dog installed, into the Clutch Housing. Orient the Clutch Dog so that it fits into the cutout in the Housing with the Clutch Spring fully extended. Orient the Clutch Hub and Housing on the Shaft so that the Grease Fitting faces the Transmission. Reassemble the Cylinder Drive Joint onto the Clutch Housing and Clutch Cover and secure it with the (6) 5/16" bolts.

STORAGE

At end of the harvesting season, it is suggested that the following steps be performed:

1. Clean Harvester thoroughly of all dirt, trash, excess grease and any other material that will absorb water and cause rust.
2. Thoroughly lubricate Harvester as indicated in the Lubrication Section of this Manual.
3. Clean and oil all Chains.
4. Paint all the parts from which the paint has been worn to prevent rust.
5. Order and replace any required parts so Harvester will be ready to operate next season.
6. Store the Harvester in a dry place where it is neither exposed to weather or livestock.
7. Release tension on the Blower Drive Belt if Harvester is to be out of operation for a long period of time.

PROTECTION OF UNPAINTED SURFACES

Apply a rust preventative oil or grease to the following unpainted surfaces.

1. Front Telescoping Drive Yoke Hub at the PTO.
2. Front Bevel Gear Transmission Shaft Spline.
3. All Roller Chains and Sprockets.

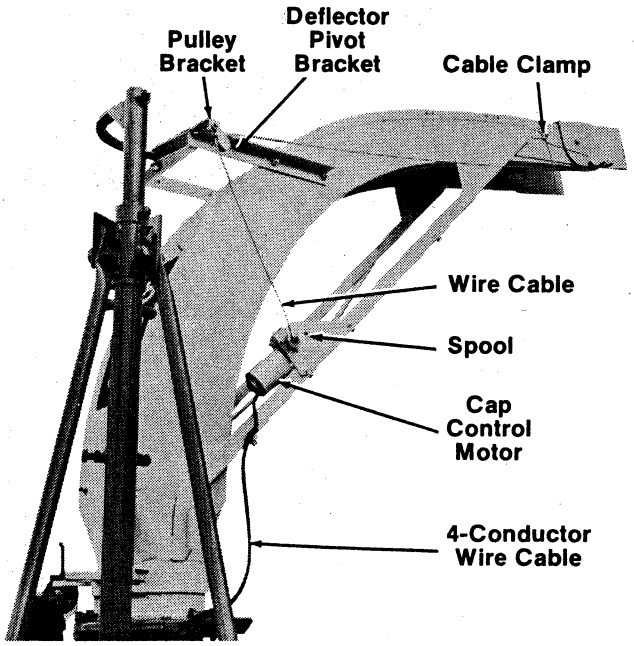


Fig. 54

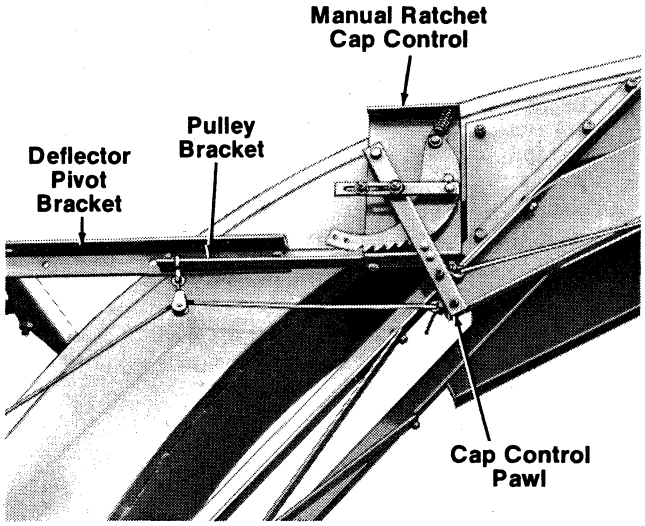


Fig. 55

Step 6a: Electric Cap Control (Fig. 54)

When Electric Cap Control is used, the Cap Control Motor should be mounted to the Deflector and linked to the Cap before the Deflector is mounted on the Blower Outlet.

Mount the Cap Motor to its mounting bracket with the Motor Shaft protruding through the hole in the bracket. Secure the Motor with (3 each) 1/4 x 1/2 HHCS and LW. Attach the Spool to the Motor shaft with the 1/8" Roll Pin provided. Attach the Pulley Bracket to the Deflector Pivot Bracket with a 5/16 x 1 HHCS, PW, LW and HN. Secure (1) 5/16 x 1-1/4 HHCS, LW and HN on the end of the Pulley Bracket and mount the Pulley by sandwiching it between (2) PW and securing it with a 5/16 HLN; tighten the HLN but allow the Pulley to swivel. Attach and clamp another Pulley onto the bracket which is welded on the Cap. Install the Cap Spring between the brackets on the Cap and Deflector (or Horizontal Deflector Extension).

Thread the Wire Cable into the hole on the side of the Spool. route the Cable up through the Pulley on the Pulley Bracket and over through the Pulley on the Cap. Route the Cable back to the hole in top of the left Deflector Brace. With the Cap all the way "up", draw the Cable taut and secure it with the Cable Clamp provided. Cut off excess Cable.

NOTE: When the Cap is all the way "up", make sure there are NO wraps of Cable around the Spool. If wraps are on the Spool, they will eventually loosen and unwrap, thus defeating the Cap Control linkage.

Refer to details at the end of Step 5a for the 4-Conductor Wire Cable connections. Termination of the Cap Motor electrical wires should be made down on the Shield Support Angle. Using Wire Clamps provided, make wire tie-downs on the left Deflector Brace, on the Blower Outlet Flange and on the Shield Support Angle.

NOTE: Wire connections and tie-downs have to be accomplished after the Deflector is mounted and secured to the Blower Outlet.

Step 6b: Manual Cap Control (For use with Hydraulic Deflector Control) (Fig. 55)

The following information gives installation procedures for Manual Cap Control on Harvester equipped with Hydraulic Deflector Control.