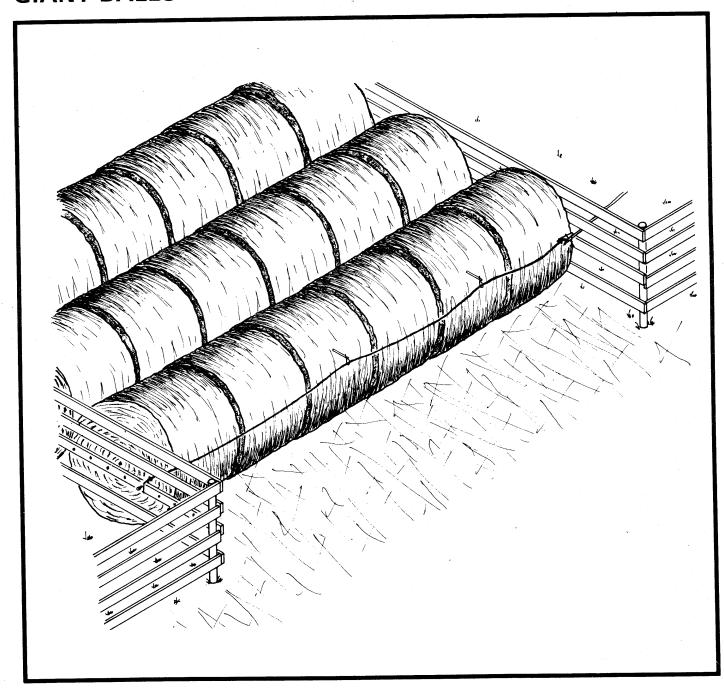


## POSITIVE SHOCK FENCE FEEDING OF GIANT BALES





The Canada Plan Service prepares detailed plans showing how to construct modern farm buildings, livestock housing systems, storages and equipment for Canadian Agriculture.

This leaflet gives the details for a farm building component or piece of farmstead equipment. To obtain another copy of this leaflet, contact your local provincial agricultural engineer or extension advisor.

## POSITIVE SHOCK FENCE FEEDING OF GIANT BALES

PLAN Q-1640 NEW 81.02

## (SASKATCHEWAN PLAN S.180)

Cattle can be fed forage without having to move feed to the animals. Electrically charged wire feeders are a proven method that can keep wastage to a minimum. Feed handling is reduced and manure is spread over a larger area, not confined to one feeding location. Large round bales are stored in a well-drained area. This area should slope away from the feeding face to provide drainage away from the stored forage. The cattle eat into the face of the roughage rather than the operator having to move the feed to the cattle.

The positive shock restraining wire provides a positive shock and ground, through two separately insulated wires. Alternate barbs about 30 mm apart make contact with shock wire and ground wire respectively. When an animal touches a ground barb and live barb at the same time, it receives a shock. An electric fence charger, 110v, solid state, is recommended with this system. One fence charger can provide sufficient shock for several fenceline feeding wires. In cold weather, place the fence charger in an insulated box with a 60 watt light bulb. By switching the light bulb on in very cold weather, the charger is kept warm, thereby providing a stronger shock.

Where space is available at the feeding site, allow:

- -500 to 600 mm of feeding fence per cow
- -450 mm of feeding fence per yearling
- -300 to 375 mm of feeding fence per calf

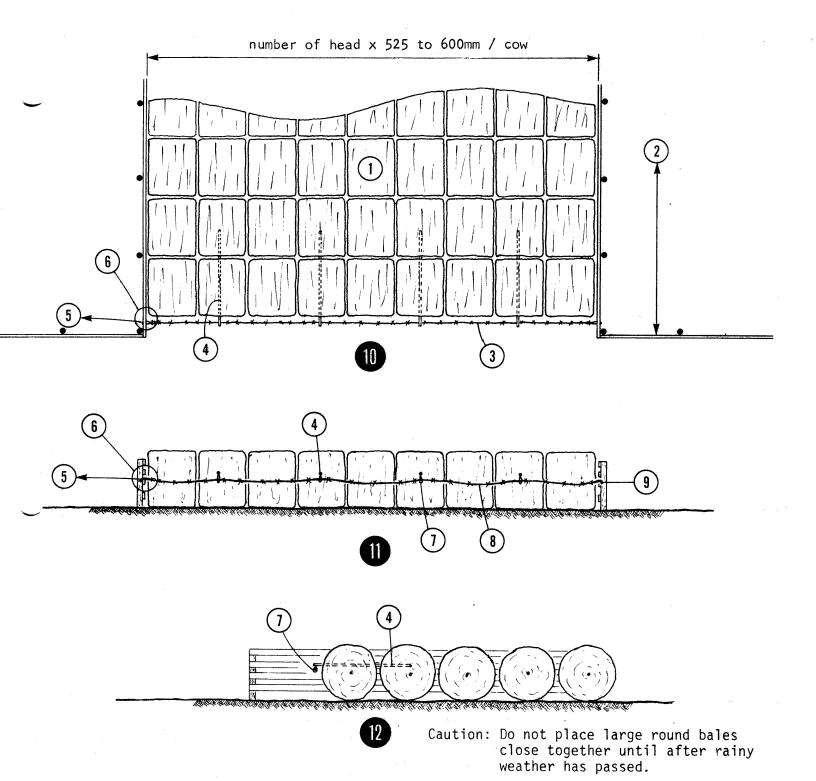
The feeding wire should be kept approximately 900 mm above ground level for large round bales. Proper positioning of the wire can limit feed and ensure that the cattle clean up the feed with a minimum of waste. The feeding wire must be far enough from the feed so that the shock wire will not short to the ground through the feed. A few minutes spent checking and trimming overhanging hay will keep the hay from shorting the wire. Rods that support the wire should be driven into the large round bales so that initially the wire is 150 mm away from the hay. This allows the cattle to eat free choice with no fear of getting shocked so they will not shy away from the electric wire. When the cattle eat into the hay and have it well cleaned up, the wire is moved closer to the hay. The adjustment distance will depend on how much feed the cattle are to eat, and how well they clean up under the wire.

The electric wire is suspended at 900 mm above the ground, 200 to 250 mm below the 4 support rods, by a nylon rope attached to eyelets welded near the ends of the support rods. The 2.4 to 3 m rods are driven into the hay. Approximately 3.9 m-long wooden rails are used for wire supports when straw is being fed. The rods should be long enough to enter part way into the second large round bale to give continuous ridged support when the first bale is partially eaten. Supports for the wire should be placed in every second large round bale. A minimum of 150 mm sag is recommended for positive shock wire where supports are 6 m apart or less. This will prevent insulation separation and shorting when contraction occurs in cold weather.

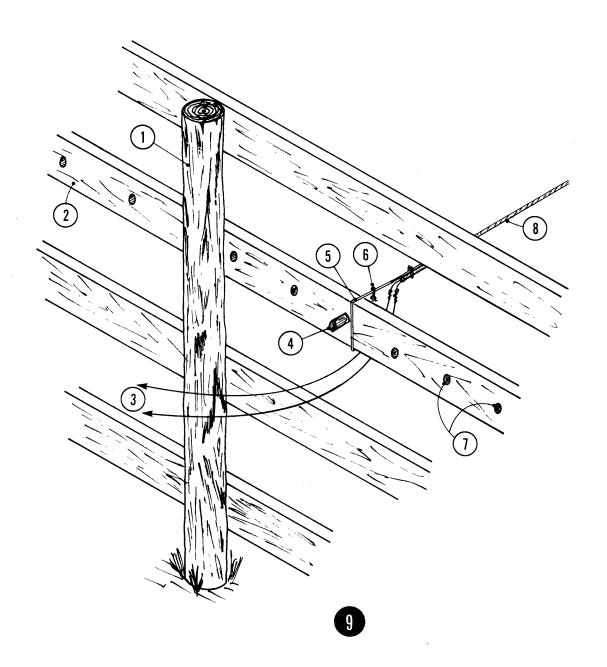
This system works equally well for loose stacks placed side-by-side, except keep the wire height 750 mm above ground level and keep the wire rod supports no more than 6 m apart.

DO NOT TURN CORNERS with positive shock wire. Always run it in a straight line. A corner turn may cause insulation separation and shorting. Both ends must be securely anchored with non-conducting material. Never use fence tighteners.

FOLLOW THE MANUFACTURER'S INSTRUCTIONS regarding connections and grounding of fence chargers and ground wire. In the event of a power failure, remove the wire so cattle will not trample it and ruin it.



- 1. large round bales
- 2. to accommodate desired feed supply
- 3. positive shock electric wire
- 4. 15M rod x 3000mm long for wire support
- 5. to solid state fence charger
- 6. see detail
- 7. nylon rope with 200mm drop, attached to eyelet welded to rod, to support positive shock wire at 900mm height
- 8. 150mm wire sag between supports
- 9. adjust rail to support wire at 900mm height (see detail)
- 10. PLAN VIEW
- 11. FRONT VIEW
- 12. SIDE VIEW



- 1. fence post
- 2. fence plank adjust top to 900mm height
- 3. to solid state charger
- 4. restraining peg
- nylon rope attach to positive shock wire as per manufacturers specifications
- 6. harness snap or similar snap -to attach nylon rope to fence rail
- 7. adjustment holes approx. 100mm apart
- 8. positive shock electric wire
- 9. POSITIVE SHOCK WIRE ADJUSTMENT DETAIL