

HOWARD ROTACADET

INSTRUCTIONS

THE HOWARD ROTACADET is a light rotary cultivator designed for shallow work such as seed-bed preparation, inter-row weeding and stubble cleaning. It is designed to work continuously at jobs requiring up to 35 h.p. The machine can, however, be mounted on tractors of 33 h.p. provided it is not used in such a way as to exceed the maximum h.p. requirement of 35 h.p. The safety clutch is set to give a maximum continuous working load of 35 h.p.

SPECIFICATION

Tillage width:	70" (177.8 cms.).
Transmission:	By Universal Drive Shaft to Bevel Gearbox; thence by Jackshaft to interchangeable sprockets and 1" pitch chain drive to solid shaft rotor. Rotor carried on permanently-sealed, self-aligning bearings.
Frame:	Welded steel, one-piece construction.
Depth Control:	By two front skids. Wheels may be fitted as an alternative.
Rotor Diameter:	16" (40 cms.).
Rotor Speeds:	235 and 290 r.p.m. at 545 tractor P.T.O. r.p.m.
Linkage:	Suitable for Category I or Category II standard linkage arrangement.

THE NEW MACHINE: First Maintenance

(unless the machine arrives from your dealer already serviced).

1. Check oil level in gearbox (use SAE 90 or Multigrade 20W/40 oil). Capacity 2½ pints (1¼ litres).
2. Grease Universal drive shaft spider bearings and wheel bearings (use Lithium base grease).
3. Remove Chaincase Cover. Apply approx. 2½ lb. (1.15 kgrs.) of

- Lithium base grease to chain and sprockets.
- Tighten all nuts and bolts.
- After two hours' work, retighten all nuts and bolts.

MOUNTING THE ROTACADET

1. Stabiliser bars or chains must be used. Limit sidewarding to 2"-3" (5-7 cms.) maximum.
2. The tractor lift rods must be lengthened, or a lift stop fitted to the lift lever quadrant to prevent overlifting of the machine. (Maximum safe angle of the drive shaft is 40° above horizontal.) Note: With Ferguson T.E.20 tractors and Allis Chalmers E.D.40 special lift rod extensions, (Part numbers 66248 and 66285 respectively) must be used in place of the standard knuckle between the lift rods and lift arms.
3. The tractor top link must be adjusted so that the top of the gearbox is horizontal "fore and aft" when the blades are on the ground. For Category I tractors the small sleeve on the top link pin should not be used. When the ROTACADET is fitted to a Massey-Ferguson 65 with high clearance arms, an extension to the P.T.O. shaft is necessary. A suitable extension is the LAWRENCE EDWARDS model T.371.

WORKING INSTRUCTIONS

1. The slower rotor speed (smaller sprocket on top as delivered) requires less power and gives a coarser till than the faster rotor speed obtained with large sprocket on top.
2. For tractor speeds above 3½ m.p.h. (5½ k.p.h.), the faster rotor speed must be used, otherwise the blades will roll over rather than penetrate the ground.
3. Lower the ROTACADET into the ground with the blades turning as the tractor moves forward. Lift it out at headlands without stopping.
4. For a coarser till, raise the hinged shield by adjusting the quadrants. For a finer till, lower the shield.

Howard Rotacadet Manual

Yicheng Fang



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AMJ, Agricultural Machinery Journal ,1963

Torque Handbook Milton Howard Aronson,Robert C. Nelson,1964

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