

DO - Always wear substantial footwear.
DO - Secure all components with lock-pins provided when towing.

DO - Check all outer joints, pins & hydraulic levels daily.
DO - Plan the excavation site and contact your local municipality or utility regarding buried services for hidden hazards.
DO - Remove loose objects such as lumber, wire etc before digging.

TOW - HOE™

OPERATORS MANUAL

DO - Exercise extreme caution when working in deep excavations; next to structures; when working on steep slopes; with wet or loose material.
Serial no.....

DO - Secure vehicle with parking brake prior to starting operation when working attached to the towing vehicle.

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DO - Allow your engine to cool before storing in a confined space.

DO - Allow additional time and distance for stopping and turning when turning and towing the machine.

DO - Observe all applicable highway regulations regarding towing are observed.

HINTS FOR SAFE OPERATION

- DO - Be safety conscious and dress properly when operating your Tow-hoe. Always wear substantial footwear.
 - DO - Secure all components with lock-pins provided when towing.
 - X DO - Check all nuts; bolts; pins; & hydraulic levels daily.
 - X DO - Pre plan the excavation site and contact your local municipality or utility regarding buried services; inspect site for hidden hazards; remove loose objects such as lumber, wire etc. before digging.
 - DO - Exercise extreme caution with controls when working in deep excavations; next to structures; when workmen are in the area; on slippery slopes; with wet or loose material.
 - DO - Secure vehicle with parking brake prior to starting operation when working attached to the towing vehicle.
 - X DO - Stop the engine and make sure all working parts are in contact with the ground, (bucket: outriggers: wheels), before making adjustments of any sort.
- FIRE ! FIRE ! FIRE !
- X DO - Handle fuel with extreme caution. Wipe off all spilled gas before starting the engine.
 - X DO-- Keep your engine free of any accumulation of dirt, grease, oil, or other flammable material.
 - X DO - Allow your engine to cool before storing in a confined space.
 - DO - Allow additional time and distance for stopping and turning when turning and towing the machine.
 - DO - Ensure all applicable highway regulations regarding towing are observed.

BE SAFE ENSURE COMMON SENSE AT ALL TIMES

X DO NOT - Allow anyone lacking in age or experience to operate your Tow-hoe.

DO NOT - Attempt to tow the unit without having the components set up and stored correctly.

DO NOT - Attempt to tow the unit with the narrow wheel option in place.

DO NOT - Allow passengers on your Tow-hoe at any time when operating or towing.

X DO NOT - Start work without completing daily maintenance checks.

X DO NOT - Use other than recommended lubricants, hydraulic oil or fuel.

DO NOT - Attempt to operate on very steep inclines.

DO NOT - "Bottom Out" the hydraulic rams continually.

DO NOT - Work around deep or soft shouldered excavations without exercising appropriate safety precautions.

DO NOT - Overtighten hose fittings as this will damage seals.

DO NOT - Adjust the pre-set relief valve on the control block.

FIRE !

FIRE !

FIRE !

X DO NOT - Fuel the engine when it is hot or whilst you are smoking.

X DO NOT - Run petrol engine in a confined space.

DO NOT - Run engine with air filter/shroud or baffle restricted or clogged with debris nor allow build up of flammable or foreign matter near exhaust, (see engine manual/instruction book).

X DO NOT - Make adjustments to your Tow-hoe with the engine running.

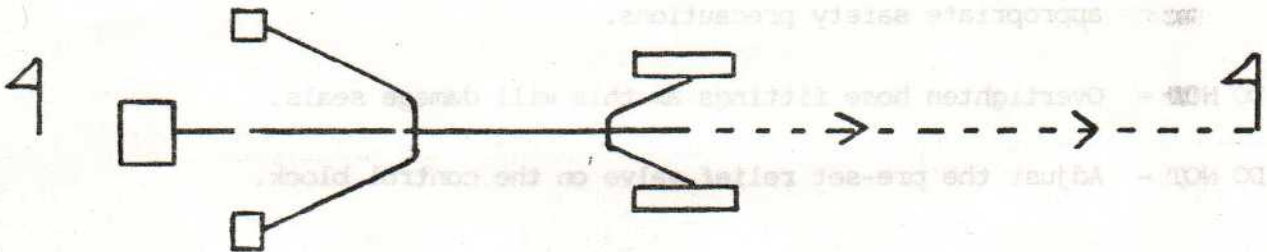
DO NOT - Store your Tow-hoe where fuel fumes may accumulate or reach an open flame or spark.

BE SAFE EXERCISE COMMON SENSE AT ALL TIMES

OPERATING HINTS

SETTING UP MADE EASY

1. To reduce weight from the hitch always remove both outriggers and extend boom and dipper to maximum reach keeping the bucket approx. 3' from the ground.
2. Always put both outriggers in the reverse position before removing any component.
3. When reversing wheels and outriggers, (see decal opp.), ALWAYS remove the outrigger component first. Wheel component can then be 'wheeled' to and secured in its operating location with ease.
4. Straight line digging example



use lime for marking between points

5. For accessory set up see accompanied instructions.

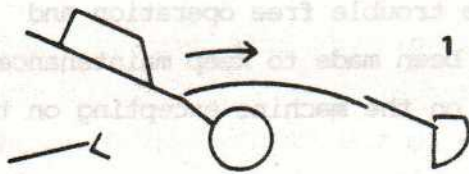
DIGGING MADE EASY

- a) Position bucket as shown fig. (i)
- b) Lower boom by pushing forward on lever 2 until resistance is encountered but DO NOT lift the outriggers from the ground.
- c) By using levers 3 & 4 a full bucket will be obtained. Should either of these movements 'stop' a slight tap on lever 2 towards operator will overcome this resistance by taking the machines' own weight off the bucket teeth.

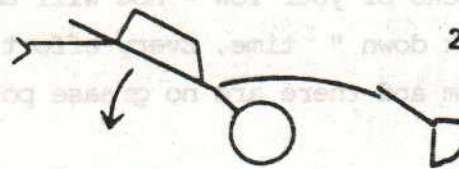


OPERATORS INSTRUCTION DECAL

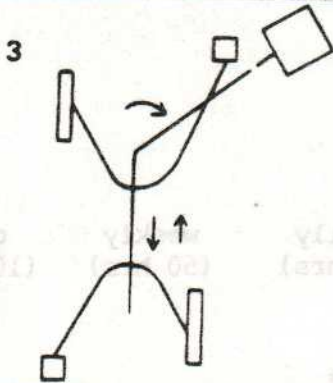
MAINTENANCE



- a) Remove outriggers
- b) Remove both locking pins
- c) Extend Boom & Dipper forward
- d) Position bucket to knee-high position
- e) Balance tow-hoe on bucket & wheels

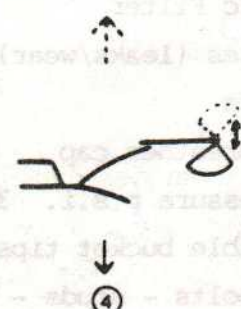
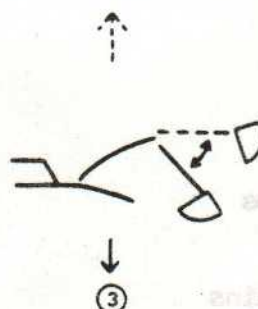
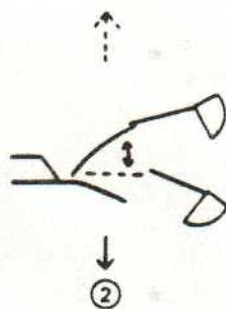
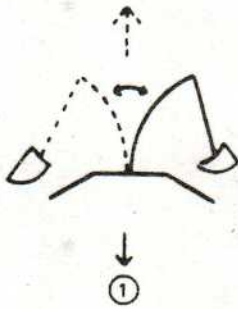


- a) Pin either outrigger in reverse position
- b) Lower tow-hoe to the ground
- c) Pin the other outrigger in the reverse position



- a) Swing boom to one side
- b) Position dipper arm in vertical position
- c) Raise wheel & outrigger 2" clear of the ground by pushing control No. 2 forward
- d) Reverse position of wheel & outrigger components (remove outrigger first)
- e) Swing boom to other side & repeat

SECURE ALL PINS



d) When digging attached to the towing vehicle ensure both wheels remain on the ground.

e) For accessory set up see accompanied instructions.

MAINTENANCE

For engine maintenance please see your engine manual.

Routine checks of your Tow - hoe will ensure trouble free operation and less " break down " time. Every effort has been made to keep maintenance to a minimum and there are no grease points on the machine excepting on the wheel hubs.

REMEMBER - A DAILY CHECK TAKES LITTLE EFFORT AND ONLY MINUTES BUT IT
COULD SAVE YOU HOURS !

* check

Items

daily (8 hrs) weekly (50 hrs) other (100+hrs)

Hydraulic Oil

*

**Hydraulic Filter

*

Hyd. Hoses (leaks/wear)

*

Cylinders

*

Filler breather cap

*

Tyre pressure p.s.i. 30lbs

*

Replaceable bucket tips

*

Nuts - bolts - studs - chains

*

**Hydraulic filter needs replacing after first 100 hours and thereafter each and every 500 hours. When replacing this it is most important to smear a film of oil over the seal.

SPECIFICATIONS

ENGINE	Honda GX 140. max. h.p. 5.0 rated @ 3600 rpm. Air cooled, 4 cycle 144cc.
or	Robin EY 20D, max. h.p. 5.0 rated @ 4000 rpm. Air cooled, 4 cycle 183cc. (for further detail see engine manual).
PUMP	Gear type: rated @ 2 galls per minute @ 3000 rpm.
VALVE BLOCK	4 - bank monoblock series valve, 4 - lever control incorporating pre-set relief valve operating @ 2200psi.
CYLINDERS	Double acting 2" bore x 12"/11" stroke. Working pressure 2500 psi: Test pressure 5000 psi: Rod - EN8 hard chromed; Tubing - C.D.S. 2 honed: End pivots are each fitted with 2 glycador PMDX non lubricated bushings.
HYDRAULIC RESERVOIR	Capacity - 15.75 litres: 7" suction strainer: Spin-on, in-line 10 micron Parker element: Magnetic drain plug.
WHEELS/SUSPENSION UNITS	Custom built 850lbs N.S.A. torsional rubberized, maintenance free system. Tyres - 5.20 x 10 wheel and 4 ply Goodyear tyre.
OIL - HYDRAULIC - ENGINE	Filtrate achilles EP 32 light hydraulic oil Type 10 30
PAINT	Implamel type QD2 enamel, brigade yellow and black.

WARRANTY

TOW - HOE SERIAL NO.....

180 days from date of user commissioning - WARRANTY is extended under the following conditions:

- Routine preventative maintenance is carried out completely and competently in accordance with operators manual.
- Replacement parts are approved by your Distributor
- Machine is not abused or used with known faults or lack of maintenance.
- Repairs are in accordance with your Distributor
at an agreed prior job rate.
- Only defective parts are covered and not wearable components which necessitate replacement through normal wear and tear, i.e. snagged hoses; punctures; bucket teeth wearing; chipped paint etc.

PERSONAL CUSTOMER GUARANTEE STATEMENT
(to be completed by dealer at point of sale)

sold to (customer).....

by (dealership)

TOW - HOE Serial No.....Date

I have completed the WARRANTY card to return to the Manufacturer not later than 14 days from point of sale. signed (salesman)