

# Operation and Maintenance for Chance Gasoline Capstan Hoist Engine

This Capstan Hoist is equipped with a Robin® 4-Cycle gasoline engine. For proper long term operation, this information must be followed. Failure to follow this information may result in damage to the engine or reduced capacity of the hoist.

## WARNING

This hoist uses a 4-cycle engine with oil in the crankcase. This oil lubricates the internal parts of the engine. This unit **MUST** be mounted with the fuel tank on the bottom and the spark plug up. The axis of the engine must be vertical within 20°. Failure to mount the unit in this manner will result in damage to the engine that is not covered by warranty.

## WARNING

Gasoline is highly flammable. Do not smoke or use near open flame when mixing fuel or when filling the fuel tank.

The fuel for this engine must be regular unleaded automobile gasoline.

## WARNING

Do not use gasoline that contains ethanol or methanol (types of alcohol). Fuels containing alcohol may damage plastic parts of the fuel system.

## WARNING

Do not make any adjustments to the fuel mixture screws on the carburetor. The engine was carefully adjusted at the factory for maximum engine life and power. Adjustments to the carburetor may damage or ruin the engine.

## Preparation and Operation

1. The engine must be stopped and cool before removing the fuel cap. Fuel spilled on a hot engine could ignite causing injury and damage to equipment.
2. Unscrew the fuel cap and carefully fill the tank to within approximately 1 inch of the top. Do not over fill. Install the cap and wipe up any spilled fuel.
3. Push the primer bulb on the bottom of the carburetor until it is full of fuel.
4. Move the ignition switch to on.
5. For a cold engine, move the choke lever to close. A warm engine may be started with little or no choke required.
6. Open the throttle, approximately 1/8 to 1/4, and pull the starter handle briskly. Pull the handle only 1/2 to 2/3 of the length of the rope. Pulling the rope to the full length may damage the starter mechanism. **Return the handle slowly. Do not let the handle snap back as this may cause damage to the equipment.**
7. After the engine starts, push the choke lever to the open position. In cold weather, the choke may have to be moved halfway for a while to keep the engine running.
8. Warm the engine up by running at a low speed for two or three minutes. **Do not run at high speed or under load until the engine is warmed up.**
9. Do not run the engine at full throttle when lifting light loads. Use partial throttle. Excessive R.P.M. may result in damage to the engine.
10. To stop the engine, reduce to idle, then move the ignition switch to off. Close the fuel valve to prevent flooding.
11. Remove any remaining fuel from the tank before temporary storage.

**SEE OTHER SIDE** ➔

These instructions do not claim to cover all details or variations in equipment, nor to provide for all possible conditions to be met with concerning installation, operation, or maintenance of this equipment. If further information is desired or if particular problems are encountered which are not sufficiently covered in this guide, contact A. B. Chance Company.

NOTE: Because Hubbell has a policy of continuous product improvement, we reserve the right to change design and specifications without notice.



POWER SYSTEMS, INC.

# CHANCE®

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# Throttle Cable Adjustment

## **WARNING**

Failure to follow these instructions may cause the throttle of this hoist to malfunction. This could result in the loss of engine speed control, which may cause damage to equipment, severe injury or death.

The throttle and carburetor are precisely and properly adjusted at the factory. **Do not make any adjustments to the carburetor mixture controls.** Proper adjustment of the throttle cable/foot control is very important to prevent damage to the carburetor and or cable.

When depressing the foot control, you will notice approximately 1/2" of free travel before the carburetor starts to open. This free travel must be present to prevent damage. The cable is adjusted properly when the carburetor is just at full throttle with the foot control fully depressed to the stop and the cable is straight (not coiled up for storage). Minor cable adjustments may be made, at the carburetor end of the cable, to ensure proper throttle operation.

## Foot Control Storage

It is very important that the cable/foot control is stored properly to prevent damage. The cable must be coiled in 2 coils. (Approximately 18" diameter coil). The foot control must be supported so it does not hang by the cable. Avoid any sharp bends, kinks or objects resting on the cable or foot control.

# Maintenance

## Daily Checks and Maintenance *Before Each Use*

1. Clean the unit thoroughly to remove dirt and debris from the cylinder area and carburetor to prevent overheating. In dusty conditions, clean the air cleaner element in hot water and soap. **Do not use gasoline or solvents for cleaning.** Blow dry with air.
2. Check for fuel leaks and correct if found.
3. Check for loose or missing fasteners. Tighten or replace as necessary.

NOTE: The fasteners on the engine are metric. Fasteners on the gearbox portion of the hoist are S.A.E. Use the proper tools and fasteners.

4. Fill the fuel tank with fresh fuel.
5. Check oil level in the crankcase following the supplied engine manual.

## Every 10 Hours of Operation *Monthly*

1. Clean the air cleaner (see above).
2. Clean and gap the spark plug. Plug gap is .024" to .028" (.06/.07 MM).

## Yearly Checks *Or as Necessary*

1. Clean the fuel filter.
2. Replace the spark plug. Use NGK BPM7A or equal.
3. Remove the muffler and remove carbon deposits from the muffler and exhaust port.

## Preparation for Long Term Storage *Longer than 3 Months*

1. Perform all of the above maintenance.
2. Drain the fuel from the tank. Start and run the engine at Idle until it runs out of fuel in the carburetor.
3. Remove the spark plug and pour 2cc of oil into the cylinder. Pull the starter handle slowly to distribute the oil in the cylinder. Stop the piston near the top of the stroke. Install spark plug.
4. Cover the unit with a plastic bag and store in a dry, well ventilated area.

**SEE OTHER SIDE** ➡

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