

OPERATION, MAINTENANCE and SAFETY MANUAL
MB16 and MTB16 Scoot-Crete Power Buggies
IMPORTANT MACHINE SERVICE NOTES

This manual covers the safety, operation and adjustment procedures for the Miller Scoot-Crete Buggy, Models MB-16. Careful observance of these instructions will result in better, safer service work.

SEVERE PERSONAL INJURY OR DEATH ARE POSSIBLE IF INSTRUCTIONS ARE NOT FOLLOWED.

SAFETY

These safety and operating instructions for Miller Spreader Scoot-Crete power buggies are for your protection. Careless disregard of these instructions and other construction practices could result in accidents and injury.

A. General Safety

This machine is equipped with Instructional and Safety decals. Should any of These decals become destroyed, faded, or otherwise illegible, Contact Crown Rental at once.

All repairs to this machine must be made by a Crown Rental service mechanic Using only MILLER SPREADER replacement parts or their approved equal.

Any deviation from the original MILLER SPREADER supplied machine in the operation, repair, and/or modifications of the machine without the express written consent of the MILLER SPREADER COMPANY, voids all machine warranties and any liability for injuries and/or damage to person or property.

B. Before putting this equipment into operation inspect the equipment daily Inspect this equipment on a hard and level surface.

1. Shut engine off.
2. Disconnect spark plug wire to prevent accidental starts.
3. Block wheels in both directions to prevent machine movement.
4. Inspect brake/brake linkage to insure proper adjustment and operation.
5. Inspect lug nuts for proper torque.
6. Inspect tires, wheels and tracks on machines so equipped.
7. Inspect all operating controls: bed dump mechanism, speed control linkage, and rear caster assembly for proper operation, cleanliness, and adjustment.
8. Inspect: engine oil level, hydraulic oil level. Follow all maintenance as outlined in MAINTENANCE section of this manual.
9. Before adding fuel:
 - Shut engine off.
 - Let engine cool for a minimum of 5 minutes.
 - Extinguish smoking materials.
 - Use funnel.
 - Do not overfill.
 - Replace fuel cap after adding fuel.
 - A hot engine may ignite spilled gasoline.

EXERCISE EXTREME CAUTION WHEN REFUELING.

10. Make any necessary repairs or adjustments before putting this equipment into Operation. All guards must be replaced.

11. Familiarize yourself with the work site and job conditions.

This equipment must only be operated by trained personnel who fully understand Its safe operation. Each operator must be able to identify any unsafe worksite Conditions and report these conditions to his supervisor for immediate correction.

12. The Gasoline Engine on this machine produces carbon monoxide (CO) and Hydrocarbon (HC) emissions through its exhaust. Inhalation of this exhaust gas can cause serious injury or death. Engine exhaust and some of its constituents are also known to cause cancer, birth defects, and other reproductive harm. The monitoring of carbon monoxide on the jobsite by a qualified inspector following OSHA guidelines is mandatory in order to determine the safety of jobsite ventilation. Do not use this machine without safe jobsite ventilation.

13. Do not operate this equipment on unsafe haul roads, load areas or dump areas. This equipment is intended for use only on leveled and compacted surfaces. AVOID ALL CONDITIONS OF SLOPE AND/OR GRADE, WHICH MAY CAUSE THIS EQUIPMENT TO TIP. Verify that all haul roads, load and dump areas will safely support the vehicle with maximum payload. All haul roads must have a suitable surface for good footing for the operator. Wet, muddy and/or loose surfaces may cause an operator to lose his footing and fall.
14. Identify all unprotected openings on jobsite and do not operate this equipment near these openings.
15. Identify all overhead structures, electrical wires, and door openings on the jobsite. Be sure this equipment will safely pass through and under.
16. Identify the load requirements for the jobsite. Do not exceed the load limits in weight or height as shown on safety and operation requirements chart. Under all operating conditions, the operator is solely responsible for a safe and secure load. If jobsite conditions so warrant, reduce load.
17. Operate this machine in daylight or OSHA approved artificial light.

SAFETY AND OPERATION REQUIREMENTS CHART

MB-16 STAND ON/WALK BEHIND

- 1) MAX. NET PAYLOAD = 2500 LBS
 - 2) MAX LOAD HEIGHT FROM GROUND = 48 INCHES
 - 3) MAX VEHICLE GVW = 3200 LBS
- LUG NUT TORQUE IN FOOT LBS FRONT 65 Ft. Lbs, REAR 65 Ft. Lbs

MTB-16 STAND ON/WALK BEHIND

- 1) MAX. NET PAYLOAD = 2,050 LBS
 - 2) MAX LOAD HEIGHT FROM GROUND = 48 INCHES
 - 3) MAX VEHICLE GVW = 4,020 LBS
- LUG NUT TORQUE IN FOOT LBS FRONT 65Ft. Lbs, REAR 65Ft. Lbs

During operation of this equipment:

18. Use caution when operating near other personnel and obstructions. Always look to the rear before backing up and back up slowly. Be aware of other jobsite traffic.
19. be sure dump body is securely down at all times when not actually dumping. Keep clear of bucket when dumping and returning bucket to transport position. DO NOT DUMP BED WHILE DRIVING EQUIPMENT. DUMP BUCKET ONLY WHEN BUGGY IS ON A LEVEL SURFACE. FAILURE TO DUMP ON OTHER THAN A LEVEL SURFACE MAY CAUSE BUGGY TO TIP.
20. This vehicle is not intended for the transportation of any personnel other than the operator. NO RIDERS!
21. Do not use excessive speed or operate recklessly. Careless operation causes accidents and injury. SLOW DOWN when operating conditions so warrant i.e. approaching other personnel, wet areas, and traveling up and down otherwise safe grade conditions. The operator is solely responsible for choosing a suitable machine travel speed for the existing jobsite conditions.
22. If operator must leave operator's station (standing between handlebars on operator's platform) operator must:
 - a) Stop equipment.
 - b) Set and lock brake.
 - c) Shut off engine by turning engine ignition switch off or depressing and holding engine stop button on dash.
23. Wear appropriate clothing/safety equipment for the construction jobsite including but not limited to safety glasses, clean gloves, safety toed work boots, hard hat, etc. Do not operate this equipment with oily gloves or controls.
24. This equipment is not intended to tow other items or equipment. NO TOWING.

25. Keep yourself and others away from pinch points on dumping mechanism.
26. Refer to LIFTING AND TIE-DOWN INSTRUCTIONS section of this manual. Note the Three (3) ways a buggy may be lifted and tied down and the appropriate lifting and tie down points for each method. Note the specific load ratings for chains, straps and forklifts.
27. Avoid all operating conditions where any personnel, including the operator, could become trapped or pinched between the buggy and another obstacle or where a lifted buggy may fall.

THIS BUGGY CANNOT BE OPERATED IN AREAS WITH FLAMMABLE OR EXPLOSIVE ATMOSPHERES. REFER TO CODE OF FEDERAL REGULATIONS OSHA 29 CFR PART 1910.178 TO DETERMINE PERMISSIBLE AREAS WHERE THESE BUGGIES MAY BE OPERATED.

28. Do not mount/dismount a moving buggy.
29. If operator chooses to walk behind the buggy during operation, the operator's platform must be lifted, pulled back & locked in the UP position before using the buggy. Reduce travel speed when using buggy in walk behind fashion.
30. If the operator chooses to ride behind the buggy during operation, the operator's platform must be lifted, pulled back & lowered down to the horizontal position before using the buggy. Keep operator's platform clean.

MACHINE OPERATION:

A. Starting MB16 (13 HP Honda gasoline engines)

1. Position yourself in operator's position standing on the ground between the handlebars or standing on the operator's platform.
2. Set parking brake. See C-3 in MACHINE OPERATION section of this manual.
3. Place directional control lever on dash in NEUTRAL position.
4. Move choke lever to closed position (When engine is cold).
5. Set throttle control to one-third open position.
6. Open fuel valve.
7. To start recoil start Honda GX390 13 HP, switch engine ignition switch to ON position and pull recoil starter until engine starts.
8. after engine starts, move choke lever to OPEN position. Let engine warm up and run smoothly for approximately 5 minutes then pull throttle to full ON position.
9. Position steering wheel in position desired.
10. Release parking brake by stepping on brake pedal until parking brake lock rod moves to full up position. Then slowly release pressure on brake pedal.

B. Starting MTB16 (18 HP Honda gasoline engine)

1. Position yourself in operator's position standing on the ground between the handlebars or standing on the operator's platform.
2. Set parking brake. See section C-3 of MACHINE OPERATION section of this manual.
3. Place directional control lever on dash in NEUTRAL position.
4. When engine is cold, move choke lever to CLOSED position.
5. Set throttle control to one-third open position.
6. Insert ignition key in start switch on engine. Turn engine start switch to START position and return switch to RUN position when engine starts.
7. after engine starts, move choke lever to OPEN position. Let engine warm up at Full throttle and run smoothly for approximately 5 minutes, before applying load. Failure to permit engine to warm up will FOUL SPARK PLUGS and CAUSE HARD STARTING and/or LOSS OF POWER. Avoid starting and stopping engine without Warming engine.
8. Position steering wheel in the position desired.

9. Release parking brake. Parking brake is released by stepping on brake pedal until parking brake lock rod moves to full up position.

10. This buggy is equipped with a LOW OIL PRESSURE LIGHT mounted on dash. When Ignition key is turned to the ON position; the oil light will come on. After engine is started, this light will go off. Should light stay on after engine has started, stop engine immediately and correct problem (low oil level, faulty oil pressure switch, faulty oil pump, etc.) NOTE: Low oil pressure or low oil level will not shut engine off.

11. To avoid draining the battery, do not leave ignition switch in the ON position when engine stops.

C. Setting and Releasing the Parking Brake

While standing on the operator's platform:

1. Place right foot on brake pedal (44) and stand on the pedal so it depress to the lowest point.

2. Continue standing on the pedal and press down on the parking lock knob.

3. While continuing to press down the parking lock knob, remove one's foot off the brake pedal.

4. Remove hand from the parking brake knob. The parking brake is now set.

5. To release the parking brake, while standing on the operator's platform, place

Right foot on the brake pedal and bounce on the pedal. When the pedal further Depresses the parking brake detent will disengage.

E. To jump start 18 HP Honda engine:

MTB-16 BUGGIES ARE EQUIPPED WITH A REMOTE MOUNTED POSITIVE JUMPER TERMINAL LOCATED ON THE LEFT SIDE INSIDE THE ENGINE CONSOLE OF THE BUGGY. IT IS COVERED BY A PROTECTIVE RED CAP MARKED "POSITIVE STUD". SHOULD THIS BUGGY NEED TO BE JUMP STARTED, FOLLOW INSTRUCTIONS BELOW TO PROPERLY USE THE JUMPER TERMINAL. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN CAUSE BURNS AND/OR EYE INJURIES FROM ELECTRIC SPARKS TO PERSONNEL OR DAMAGE TO ENGINE.

1. Wear OSHA approved safety glasses.

2. Lock parking brake. Shift directional control lever to NEUTRAL position.

3. Turn ignition switch on engine to OFF position.

4. Jumper vehicle used to start buggy must have a 12-volt electrical system. Failure to use a vehicle with a 12-volt electrical system will damage both vehicles' electrical systems.

5. Position jumper vehicle as close to the buggy as possible, but do not allow vehicles to touch. If buggy and jumper vehicle touch, both electrical systems may be damaged.

6. Turn off ignition of jumper vehicle.

7. Lift hood of jumper vehicle and locate POSITIVE (+) and NEGATIVE (-) battery Terminals.

8. Use only jumper cables in good condition with tight connections, secure insulation and a 100 AMP (5 gauge minimum) rating.

9. Make cable connections as follows:

a) Remove Red Protective Cap from the remote mounted POSITIVE jumper Terminal on buggy.

b) Attach one (1) end of POSITIVE (+) jumper cable to the remote mounted POSITIVE jumper terminal.

c) Attach the other end of the POSITIVE (+) jumper cable to the POSITIVE (+) Terminal of the jumper vehicle's battery.

d) Connect one (1) end of the NEGATIVE (-) jumper cable to the NEGATIVE (-) Battery terminal on the jumper vehicle's battery.

e) Connect the other end of the NEGATIVE (-) jumper cable to the bare metal Location, i.e. bolt head, ties down lug. etc., on buggy. DO NOT CONNECT THIS CABLE ANYWHERE ON THE ENGINE.

- f) Start jumper vehicle engine.
- g) Start buggy engine.
- h) Remove jumper cables in reverse order in which they were attached. At no Time should jumper cable clamps touch each other or any other metal.
- I) Replace the Red Protective Cap on the remote mounted POSITIVE jumper Terminal.

F. Driving Equipment

10. The Directional Control Lever (located on the top right side of the dash) controls the direction of travel, forward, reverse and neutral (free-wheeling). Select the direction of travel desired. The Speed Control Lever (located on the right side of the handle bar) controls the vehicle speed, power, and dynamic braking.

IMPORTANT OPERATORS NOTE: When starting from a stop, steadily pull the Speed Control Lever towards the hand grip. The more the Speed Control Lever is squeezed towards the hand grip the faster the buggy will move. Position the Speed Control Lever where the engine does not lug to achieve maximum speed or power depending on jobsite conditions. Do not use the engine rpm speed to control buggy speed. Letting the Speed Control Lever return to the neutral position will SLOW the buggy and increase power at the drive wheels, acting as a "downshift".

11. to slow and/or stop vehicle:

- Release speed control lever.
 - Service brake pedal (located at right of stand-on platform) may be pushed Down to activate service brake and assist in slowing the vehicle.
 - Avoid sudden stops whenever possible.
12. Parking brake may then be applied by pushing down and holding service brake pedal, pushing down parking brake lock rod (located on right rear of dash), and then releasing pressure on service brake pedal.

Slower, more power

Faster, less power

G. Dumping Bed

DO NOT DUMP BED WHILE BUGGY IS MOVING

1. Stop vehicle.
2. Push the Dump Control Lever (either Console Mounted or Handle Mounted) forward towards the front of the buggy to dump bucket. Console Mounted Dump Controls have a foot pedal on the left of the operator's platform that can be pushed down to dump the bucket.
3. Pull the Dump Control Lever (either Console Mounted or Handle Mounted) backward towards the operator to retract the bucket. Console Mounted Dump Controls have a foot pedal on the left of the operator's platform that can be pulled backward to return the bucket.

H. Stopping Engine

1. Turn ignition switch to the OFF position or push and hold engine stop switch on dash.
2. Turn fuel valve on engine to the OFF position. Failure to do so will ultimately result in gas entering the crankcase.

MAINTENANCE

Place buggy on level ground, shut off engine, apply parking brake, and lock all wheels before servicing. Should bucket or platform need to be kept in the raised position, securely block bucket in raised position.

WHEN BUCKET IS RAISED, THE SPACE BETWEEN RAISED BUCKET AND BUGGY FRAME IS A PINCH POINT.



A. Machine Clean Up:

THIS BUGGY MUST BE CLEANED DAILY TO PREVENT CONCRETE AND DIRT BUILD-UP FROM ADVERSELY AFFECTING SAFE MACHINE OPERATION. WASH BUGGY DOWN EACH DAY WITH WATER.

Important areas to clean:

1. Tires (6)
2. Brake covers (2) & linkage
3. Operator's platform
4. Hydraulic reservoir cover (keep all louvers clean).
5. Parking brake and linkage
6. Dump lever controls
7. Bucket
8. Handle bar and speed control lever
9. Directional control lever
10. Hydraulic lift cylinder

NOTE: Do not spray water on hot engine.

IMPORTANT NOTE FOR TRACK MACHINES: The tracks must be thoroughly cleaned daily (Preferably with a pressure washer) to remove dirt, concrete, etc that can cause premature wear of the track components or reduced performance.

A. Engine Maintenance:

Check engine oil daily.

Allow engine to warm up at idle before applying load.

B. Hydraulic Drive/Bucket Dump:

1. Check hydraulic oil level daily. Check oil level with bucket in the "down" position, and with oil temperature cold. Fill reservoir to bottom of bolt head on filler cap or "F" mark on dipstick with SAE 10W-40 weight SE motor oil. Reservoir capacity is 18.7 quarts.

2. Inspect all hydraulic hoses & fittings daily.

C. Chassis Lubrication

Lubricate all machine points per the following schedule:

Bucket Platform Bushing (2) Daily Kendall Hi-temp grease M-612 or equal

Lower Steering Column Bearing Tube - Weekly Kendall Hi-temp grease M-612 or equal

Speed Control Lever Weekly WD-40 spray lubricant or equal

All Brake Pivot Points Weekly WD-40 spray lubricant or equal

All Bucket Dump Lever Pivot Points Weekly WD-40 spray lubricant or equal

Bucket Dump Valve Spool Weekly WD-40 spray lubricant or equal

Directional Control Valve Spool Weekly WD-40 spray lubricant or equal

E. Brake

Inspect both service brake and parking brake lock DAILY. Parking brake must hold a loaded buggy on 15% grade (8.5degrees). Service brake must lock both drive wheels of a loaded buggy when brake pedal is applied while buggy is in motion. If adjustment is required to bring brake operation up to these specs, CONTACT CROWN RENTAL.

F. Wheels & Tires

1. Inspect daily all wheels/tires for structural damages, tears, rips, bent wheels, etc.

DO NOT OPERATE THIS BUGGY WITH ANY DAMAGED TIRE/WHEEL ASSEMBLIES.

2. Inspect lug nut torque DAILY.

Tighten all loose lug nuts to 65 ft. lbs. of torque. If lug nuts must be removed, before nut removal clean threads on studs with wire brush and spray with WD-40 type lubricant.

G. Tracks and Idler Wheel

1. Inspect daily all wheels, tires, and track components for structural damage, tears, rips, bent wheels, etc.



2. Check to make sure track sections are snugly together. Component wear will result loose connections.

LIFTING / TIE-DOWN INSTRUCTIONS

1. To tie-down: lower bucket, check all wheels, engage parking brake, secure to trailer bed using 3 chains or straps.

2. To lift with forklift: lower bucket, place operator's platform in down position on MB-16 insert forks in two pockets through both sides of buggy frame. USE FORKLIFT DESIGNED TO LIFT 2000 LB PAYLOAD.

3. To lift with crane: raise bed and lift with 3 chains or straps, USE CRANE DESIGNED TO LIFT A 2000 LB PAYLOAD.

FOR LIFTING AND TYING DOWN USE OSHA APPROVED CHAINS OR STRAPS WITH A MINIMUM WORKING LOAD LIMIT OF 2500 LB. LIFT OR TIE DOWN ONLY WHEN BUCKET IS EMPTY. WHEN TRANSPORTING BUGGY WITH ENGINE OFF, SHUT FUEL OFF TO PREVENT DAMAGE TO ENGINE. AVOID ALL OPERATING CONDITIONS WHERE PERSONNEL MAY BECOME TRAPPED OR PINCHED BETWEEN THE BUGGY AND ANOTHER OBSTACLE OR WHERE A LIFTED BUGGY MAY FALL.