



**OWNER'S  
MANUAL**

**PARTS  
BOOK**

# UNI-SCREED

MUSH35



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**ORIGINAL LANGUAGE OPERATING MANUAL FOR  
BARTELL RIDE-ON TROWELS**





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REV.	DATE	DESCRIPTION	APPROVED BY:
1	10/2017	Updated item 35 P/N: 11792 was 23007	AN
2	11/2017	Updated item 2 P/N: 11914 was 11069	AN
3	12/2017	Updated item 12 P/N: 10670 was 23046, Updated item 18 P/N: 23156 was 11053, Updated item 41 P/N: 23157	AN
4	01/2018	Updated throttle cable installation instructions	AN
5	08/2019	Updated Item 19 P/N: 11051 was 23019, Update Address	AN
6	01/2020	Updated parts list	AN
7	07/2023	Updated logos	AN

<b>SAFETY PRECAUTIONS</b>	
	<p><b>DANGER</b> <b>EXPLOSION HAZARD</b></p> <p>Never operate the machine in an explosive atmosphere, near combustible materials, or where ventilation does not clear exhaust fumes.</p>
	<p><b>WARNING</b> <b>BURN HAZARD</b></p> <p>Never come into contact with the engine or muffler when engine is operating or shortly after it is turned off. Serious burns may occur.</p>
	<p><b>CAUTION</b> <b>MOVING PARTS</b></p> <p>Before starting the machine, ensure that all guards and safety devices are in place and functioning properly.</p>
	<p><b>ATTENTION</b> <b>READ OWNER'S MANUAL</b></p> <p>Read and understand owner's manual before using this machine. Failure to follow operating instructions could result in serious injury or death.</p>

<b>Personal Protective Equipment (PPE)</b>	
	<b>Hearing Protection</b> Wear earplugs or earmuffs to protect hearing from potentially damaging noise levels
	<b>Eye Protection</b> Wear eye protection to protect eyes from blowing dust, splattering concrete, and other foreign objects
	<b>Safety Footwear</b> Wear safety footwear to protect feet from falling objects, compression and punctures or cuts from surrounding and below
	<b>Hand Protection</b> Protect exposed skin surfaces when working with fresh concrete to avoid skin irritation or chemical burns

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## **QUALITY ASSURANCE/ MACHINE BREAK IN**

The Morrison Uni-screed is the product of extensive engineering development designed to give long life and unmatched performance. You can help ensure that your Uni-screed will perform at top levels by observing a simple routing on first use. Consider that your new Uni-screed is like a new car. Just as you would break in a new car to the road or any new machine to the job, you should start gradually and build up to full use. Learn what your machine can do and how it will respond. Refer to the engine manufacturer's manual for run-in times. Full throttle and control may be used after this time period, as allowed by material. This will serve to further break in the machine on your specific application, as well as provide you with additional practice using the machine.

We thank you for the confidence you have placed in us by purchasing a Morrison Uni-screed and wish you many years of satisfied use.

## **WARRANTY INFORMATION**

Bartell Morrison Inc. agrees to furnish without charge, F.O.B. our plant, a replacement for any part or portion thereof, comprising the base unit of the Morrison Uni-screed, consisting of the drive shaft assembly and the clutch assemblies, save and except power units and/or bearing or electrical controls which prove upon our examination, to be defective in either material or workmanship within a period of twelve (12) months from date of purchase, provided that notice of such defective part or portion thereof is given to Bartell Morrison Inc. within the twelve month warranty period. No further or other guarantee or warranty expressed or implied in connection with the sale of the Morrison Uni-screed is given and our sole liability consists in replacing defective parts or portions thereof. We shall not be responsible for any special, indirect or consequential damages arising in any manner whatsoever.

This guarantee is for the sole benefit of the original purchaser as end user. Our responsibility under this guarantee ends in the case the original purchaser transfers ownership of the Morrison Uni-screed, makes any changes or adds any parts or devices not of our manufacture to the Uni-screed.

## **SPECIFICATIONS**

Handle (fully adjustable)	28lbs (12.7kg)
Blades	4' (1.2m) 6.41lbs (2.9kg)
	6' (1.8m) 9.6lbs (4.4kg)
	8' (2.4m) 12.8lbs (5.8kg)
	10' (3.0m) 16.0lbs (7.3kg)
	12' (3.7m) 19.2lbs (8.7kg)
	14' (4.5m) 22.4lbs (10.2kg)
	16' (4.9m) 25.6lbs (11.6kg)
Engine	1.3hp, 35cc, recoil start, air cooled, single overhead cam cylinder
Fuel Capacity	0.17 gal (0.65L)
Oil Capacity	3.4 U.S. oz (0.1L)
Estimated Running Time	1.1hrs @ 7000rpm
Weight (dry)	27.9lbs +blade (12.7kg +blade)
Sound Power	29.6lbs +blade (13.5kg +blade)
Weight (operating)	50 Dba
Vibration	<9 m/s <sup>2</sup>



## PREVENTATIVE MAINTENANCE AND ROUTINE SERVICE PLAN

This MORRISON UNI-SCREED has been assembled with care and will provide years of service. Preventative maintenance and routine service are essential to the long life of your Screed. Your dealer is interested in your new machine and has the desire to help you get the most value from it. After reading through this manual thoroughly, you will find that you can do some of the regular maintenance yourself. However, when in need of parts or major service, be sure to see your Bartell Morrison dealer. For your convenience, we have provided this space to record relevant data about your MORRISON UNI-SCREED. When in need of parts or service be prepared to provide your Screed serial number. Locate the serial number now and record in the space below.

Date Purchased:		Type of Machine:	
Dealer Name:		Model:	
Dealer Phone:		Serial Number:	

Replacement Parts Used				Maintenance Log:	
Part No.	Quantity	Cost	Date	Date	Operation

## ROUTINE SERVICE SCHEDULE

Routine Service Intervals		Each Use	First months or 10 hrs	Every 3 months or 25 hrs	Every 6 months or 50 hrs	Every year or 100 hrs	Every 2 years or 300 hrs
<b>General Inspection</b>							
Warning Stickers	Check	○	○	○	○	○	○
Test run:	Operation		○	○	○	○	○
<b>Engine</b>							
Engine Oil	Check level	○					
	Change		○		○		
Spark Plug	Check-adjust					○	
	Replace						○
Timing Belt	Check		After every 300 hrs (2) (3)				
Cooling Fins	Check				○		
Air Cleaner (2)	Check-clean	○ (1)		○			
	Replace					○	
Air Intake Line	Check				○		
	Replace						2 yrs
Nuts, bolts, fasteners	Check (Retighten if necessary)	○					
Clutch Shoes	Check				○ (2)		
Idle Speed	Check-adjust					○ (2)	
Valve Clearance	Check-adjust				○ (2)		○
Combustion Chamber	Clean		After every 300 hrs (2)				
Fuel Filter	Clean					○ (2)	
Fuel Tank	Clean					○ (2)	
Fuel Tubes	Check		Every 2 years (Replace if necessary) (2)				
Oil Tube	Check		Every 2 years (Replace if necessary) (2)				

- (1) Service more frequently in dusty areas
- (2) Refer to engine owner's manual for servicing instructions and a detailed maintenance schedule. Some items should be serviced by your servicing dealer, unless you have the proper tools and are mechanically proficient. Refer to the Honda shop manual for service procedures
- (3) Check that there is no crack and abnormal wear-out in the belt, and replace if it is abnormal

## **UNISCREED INFORMATION**

### **GENERAL HEALTH AND SAFETY TIPS**

- Do not use the Morrison Uni-screed, fitted with a gasoline engine, indoors or in poorly ventilated areas. Ensure there is sufficient ventilation to avoid inhaling exhaust gasses, as they may be harmful.
- Avoid touching the electrical cables or spark plug cap while the engine is running to avoid electric shock.
- Check the fuel tank and lines for leaks before starting engine.
- Wear appropriate personal protective equipment while operating the Morrison Uni-screed.
- Protective footwear, safety glasses, hearing protection, padded gloves, and a dust mask are highly recommended.
- Wear work gloves and safety glasses while refueling the Morrison Uni-screed.
- Ensure sufficient ventilation during refueling to avoid a build-up of dangerous fumes.
- Refuel the Morrison Uni-screed only after the engine has cooled after use.
- Avoid smoking or open ignition sources such as furnaces, welders or torches during refueling.
- Avoid contact of limbs with the vibrating blade or base unit during operation. Use only the handles to control the Morrison Uni-screed.
- Some vibration in the control handles during operation is normal. Take appropriate measures dictated by your workplace regulations to minimize health effects of vibration exposure.
- Regular maintenance and inspection of the Morrison Uni-screed can prevent injuries caused by worn-out or damaged equipment and will extend the useful life of your unit.
- Carry the Morrison Uni-screed by the carry handle, lifting carefully to avoid back injury.
- NEVER carry the Morrison Uni-screed while the engine is running.
- Always avoid direct skin contact with fresh concrete.

## **MAINTENANCE AND CLEANING**

Due to the nature and environment of use, the Uni-screed is exposed to severe operating conditions.

- Some general maintenance guidelines will extend the useful life of your trowel.
- It is highly recommended that all maintenance and repairs are carried out by approved Bartell Morrison dealers.
- Always use genuine Bartell Morrison replacement parts; use of foreign parts may void your warranty and result in injury or damage to property.
- Refer to your engine manual for details of engine cleaning, maintenance, and your engine's warranty coverage.
- Clean concrete, dust, and residue from the blade and base unit daily. Failure to do so will result in decreased performance and premature failure.
- The blade and lower base unit (i.e. below the engine) can be cleaned with a water sprayer.
- Avoid getting water inside the engine housing or into the on/off switch on the handle.
- Clean the engine ventilation openings using a brush or damp cloth. Dirt, grease, or concrete entering the ventilation openings will reduce engine cooling, leading to premature engine wear and failure. Refer to your engine manual for more information.
- Inspect the Morrison Uni-screed at the end of each working day for signs of wear or damage.
- Store the Morrison Uni-screed in a clean, dry, and dust free place.

## ASSEMBLY INSTRUCTIONS

### INITIAL SETUP OF THE UNI-SCREED

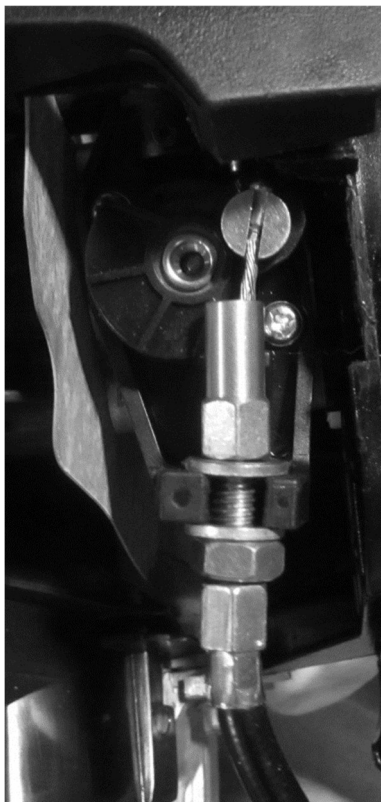
Upon removing the Morrison Uni-screed from its box for the first time, you will find the base unit with the handles removed. The left handle is detached in the box, while the right handle is attached to the base unit by its electrical cable and throttle control cable. The throttle cable is not connected to the throttle lever or engine to avoid damage to the cable, lever or engine during shipping.

Set up the handles using the clamps and hex key provided. Set the length and rotation to suit the operator. Then to set up the throttle cable, follow the steps below:

- Squeeze throttle lever open to expose the throttle cable carrier
- Place the ball of the cable in the carrier (Fig #1) and line the cable through the slot in the carrier, housing, barrel and barrel locking nut
- Release the lever and turn the barrel and locking nut so the slots do not align, and lock the barrel in place with the locking nut
- Open the Honda engine air filter cover by gently squeezing the clip on the front of the black filter housing and remove the cover



**Fig #1: Ball installed in carrier**



- Pull the throttle cable over to the engine throttle wheel.
- Rotate the silver throttle wheel so that the larger hole is pointing toward the top of the engine.
- Slide the stainless-steel throttle cable through the slot in the silver throttle wheel. Make sure the throttle cable nipple is above the silver throttle wheel.
- Pull throttle cable down to slide nipple into the larger hole in the throttle wheel
- Place the threaded fitting of the throttle cable conduit into the clamp below the throttle wheel. With a washer on either side
- Tighten the nuts of the threaded fitting onto the clamp to lock the conduit in place. Adjust the tension and length of the throttle cable by moving these nuts
- With the throttle grip at the end of the right operator handle released, the throttle wheel on the Honda engine should be at the zero position.
- After verifying the operation of the throttle cable by squeezing the throttle grip a few times, replace the air filter cover on the Honda engine. Your Morrison Uni-screed is now ready to use!

**Fig #2: Correctly installed cable in throttle wheel**

## OPERATION OF THE UNISCREED

### OPERATING PRINCIPLE

An eccentric weight mounted on the exciter shaft contained within the vibration housing is driven at high speed by a clutch drive system. This high-speed shaft revolution causes the rapid vibratory motion of the blade as well as imparting a forward motion. The Morrison Uni-screed is designed to run at an engine speed (engine take off shaft) of 3600 rpm. (Normally considered full throttle). Running the engine at lower rpms will result in a decrease of consolidation force and lower travel speed. It will create excessive “out-of-synch” vibrations resulting in poor consolidation, maneuverability, excessive wear to the machine, and discomfort to the operator.

### STARTING PROCEDURE: *WARM CLIMATE*

Open fuel valve on gas tank. Set throttle lever to “Fast” idle position, set choke to closed position, start engine. Open choke slightly to prevent flooding. Move to “Open” or “Run” position when engine is warm, increase throttle to maximum operation position (3600 rpm).

### STARTING PROCEDURE: *COLD CLIMATE*

Follow same procedure as above but allow longer warm-up period – 3 to 5 minutes. In cold weather, oil is much heavier to move and requires more time to work its way into the moving parts. If maximum power is not attained, allow further warm-up time. Fill fuel tank with clean gasoline, use safety approved gas containers. **DO NOT MIX OIL WITH GASOLINE – USE UNLEADED GAS ONLY.**

### STOPPING PROCEDURE

1. Throttle engine down.
2. Depress or turn off stop switch.

### OPERATION

1. On level surfaces the Uni-screed moves forward or backward rapidly, depending on the tilt of the handle. On uneven surfaces or inclines, light forward pressure on handle may be required to assist the Uni-screed in moving. Lean the handle up or away from you to make the Uni-screed travel toward you (i.e. forward). Lean the handle down or toward you to make the Uni-screed travel away from you (i.e. backward).
2. **ALWAYS OPERATE THE MACHINE AT FULL THROTTLE.** If excessive vibration is felt through the handle, do not operate until the engine is checked and set at its maximum running speed of 3600 rpm.
3. The handle has four (4) adjustment clamps to allow the operator to use the Uni-screed more comfortably. Ensure that the screws of all the clamps are tightened to securely hold the handle sections rigidly. A loose clamp will cause that section to rotate and/or slide away from the desired position.

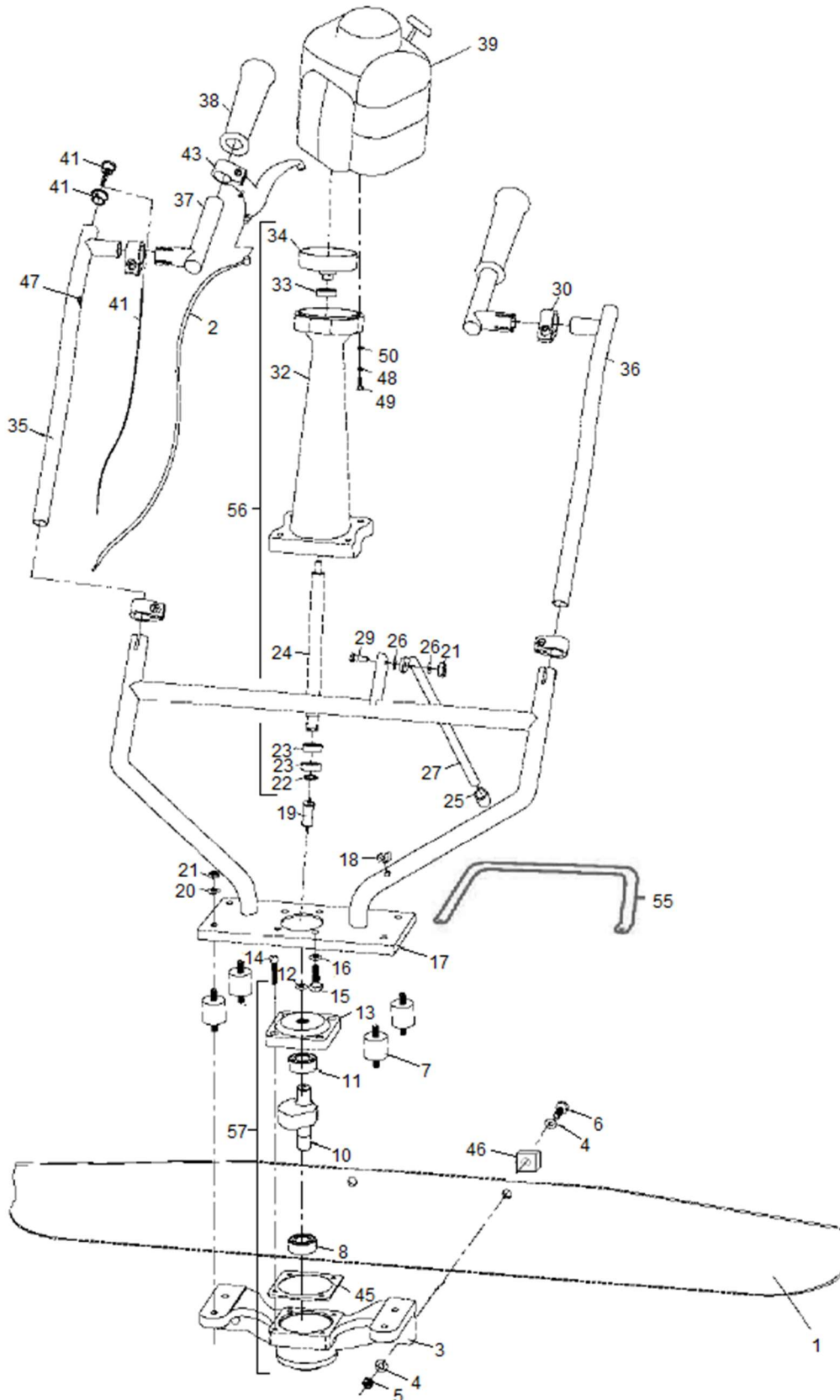
**LUBRICATION- ENGINE OIL-** Always check engine oil before starting and at regular intervals thereafter. Use proper engine oil as recommended. Keep engine oil clean, change accordingly.

**\*Fill crankcase to levels as recommended in manufacturer’s engine manual\***

**ASSEMBLY DRAWING AND PARTS LIST**



# ASSEMBLY DRAWING





## PARTS LIST

Item #	Part #	Description	QTY	Remarks
1	22905	SCREED BLADE, 4 FT (SHOWN)	1	
	22904	SCREED BLADE, 6 FT		
	22903	SCREED BLADE, 8 FT		
	22902	SCREED BLADE, 10 FT		
	22901	SCREED BLADE, 12 FT		
	22906	SCREED BLADE, 14 FT		
	22907	SCREED BLADE, 16 FT		
2	11914	THROTTLE CABLE	1	
2a	23158	THROTTLE HOOK UP FASTENERS, THREAD, WASHERS AND NUT	1	
3	23001	VIBRATION BASE	1	
4	10993	FLAT WASHER, M12	4	
5	14268	LOCK NUT, M12-1.25.	2	
6	10992	HEX HEAD BOLT, M12-1.25x60MM LG.	2	
7	11049	VIBRATION ISOLATION MOUNT	4	
8	12464	BEARING, 62203-2RS1, LOWER BASE	1	
10	23005	SHAFT W/ COUNTERWEIGHT	1	
11	12449	BEARING, 5202-2RS, UPPER BASE	1	
12	10670	OIL SEAL, SHAFT, 15 X 30 X 7	1	
13	23006	FLANGE, UPPER CONNECTOR	1	
14	11028	HEX SOCKET CAP SCREW, M6 X 30MM LG,	4	
15	10997	HEX HEAD BOLT, M8-1.25 X 20MM LG	4	
16	10998	LOCK WASHER, M8	4	
17	23002	BASE UNIT HANDLE, CHROME PLATED	1	
18	23156	RUBBER CLIP, KICKSTAND	1	
19	11051	VIBRATION ISOLATION SHAFT	1	
20	11000	FLAT WASHER, M8	8	
21	11054	LOCK NUT, M8	9	
22	11059	RETAINING RING, EXTERNAL SHAFT	1	
23	12466	BEARING, 6201-ZZ, LOWER DRIVE SHAFT	2	
24	23003	DRIVE SHAFT	1	
25	11060	RUBBER CAP, KICKSTAND	1	
26	11055	PLASTIC WASHER, KICKSTAND	2	
27	23004	KICK STAND, CHROME PLATED	1	
29	10999	HEX HEAD BOLT, M8 X 20MM LG	1	
30	11058	HANDLE CLAMP	4	
32	23000	HOUSING, SHAFT	1	
33	12467	BEARING, 6201-LLU, UPPER DRIVE SHAFT	1	
34	11061	CLUTCH DRUM	1	
35	11792	HANDLE SECTION, RIGHT, PUSHBUTTON TYPE	1	
36	23008	HANDLE SECTION, LEFT	1	
37	23009	HANDLE GRIP SECTION	2	
38	11056	HAND GRIPS, HANDLE, PAIR	1	
39	21365	ENGINE, HONDA GX35, 1.3 HP, 7000 RPM	1	

<b>Continued Next Page</b>				
41	23157	ON/OFF ROUND TOGGLE SWITCH	1	
		ALUM HOUSING FOR SWITCH	1	
		ON/OFF SWITCH WIRE	1	
43	11064	THROTTLE HANDLE	2	
45	23013	GASKET	1	
46	23150	SQUARE BUSHING, ALUMINUM	1	
47	23153	GROMMET	2	
48	14448	LOCK WASHER, M6	2	
49	11495	HEX SOCKET CAP SCREW, M6-1.0 X 40MM LG	4	
50	14447	FLAT WASHER, M6	4	
55	23151	CARRY HANDLE	1	
56	23030	SHAFT HOUSING ASSEMBLY (ITEMS 22, 23, 24, 32, 33, 34)	1	
57	23031	EXCITER ASSEMBLY (ITEMS 3, 8, 10, 11, 13, 12, 14, 45)	1	

## **DECLARATION OF CONFORMITY**

Declaration of Conformity / Certificat de conformité / Gelijkvormigheids certificaat Declaración de Conformidad/Declaração de Conformidade/Dichiarazione Di Conformita

We: Bartell Morrison Inc.  
170 Traders Blvd E.  
Mississauga, Ontario, Canada  
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Fax: 647-953-4101

- EN** Declare under our sole responsibility that the product to which this declaration relates is in conformity with the following standard(s) or other normative documents.
- FR** Déclarons sous notre responsabilité que le produit cette déclaration est conforme aux normes suivantes ou d'autres documents habituels.
- NL** Verklaren onder onze verantwoordelijkheid dat het product naar welke de verklaring verwijst conform de volgende standaards of anders gebruikelijke documenten is.
- ES** Declaramos bajo nuestra única responsabilidad que el producto en lo que esta declaración concierne, es conforme con la siguiente normativa u otros documentos.
- PT** Declara sob sua responsabilidade que o produto a quem esta declaração interessar, está em conformidade com os seguintes documentos legais ou normas directivas.
- DE** Dichiariamo sotto la ns. unica responsabilita che il prodotto al quale questa dichiarazione si riferisce, è fabbricato in conformità ai seguenti standard e documenti di normative.

EN 349:1993	Safety of Machinery - Minimum gaps to avoid crushing of parts of the human body.
EN ISO 13850:2006	Safety of Machinery - Emergency stop equipment - Principles for design
EN ISO 12100	Safety of Machinery - General principles for design – Risk assessment and risk reduction
EN ISO 3744	Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for an essentially free field over a reflecting plane
EN ISO 5349-1:2001	Mechanical vibration. Measurement and evaluation of human exposure to hand-transmitted vibration. General requirements
EN ISO 5349-2:2001	Mechanical vibration. Measurement and assessment of human exposure to hand-transmitted vibration. Practical guidance for measurement at the workplace.

Following the provisions of Directive(s):

Suivant les directive(s) déterminées:

Volgens de vastgestelde richtlijnen:

Siguiendo las directiva(s):

No sequimento das clausulas da Directiva(s):

Seguendo quanto indicato dalla Direttiva(s):

2006/42/EC	Machinery Directive
2000/14/EC	Noise Directive
2001/95/EC	General Product Safety Directive
2002/95/EC	Reduction of Hazardous Waste Directive

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