



MBRPCM107HA.1

ITEM NUMBERS: BRPCM107H, BRPCM109H, BRPCM209H

MANUAL SERIAL TAG HERE

BRAVE

Operator’s Safety & Service Manual Concrete Mixer

⚠ WARNING

- READ and UNDERSTAND this manual completely, before using this Concrete Mixer.
- All operators of this equipment must read and completely understand all safety information, operating instructions, maintenance and storage instructions. Failure to properly operate and maintain this **Concrete Mixer** could result in serious injury to the operator.
- **WARNING:** Wear appropriate protective gear. This list includes, but is not limited to:
 - A hard hat
 - Protective boots with slip resistant soles
 - Protective goggles
 - Heavy gloves
 - Hearing protection
 - **DANGER:** Keep riders off machine. Riders can be seriously injured or killed by entanglement or by falling.
 - **WARNING:** Rotating part hazard always stand clear of the drum when mixer is in operation.
 - **WARNING:** LETHAL EXHAUST GAS! An internal combustion engine discharges carbon monoxide, which is a poisonous and odorless invisible gas. Death or serious illness may result if inhaled. Operate only in an area with good ventilation.
 - **DANGER:** Use extreme caution when storing, handling and using fuels - they are highly volatile and explosive in the vapor state. Do not add fuel while engine is running. Stop and cool the engine before adding fuel.
 - **WARNING:** Excessive towing speed can cause serious injuries or death. Do not exceed 45 mph. (73KM/HR)
 - **WARNING:** Stop engine, disconnect spark plug wire and wait for all moving parts to stop before servicing, maintaining, cleaning or making any adjustments.
 - **WARNING:** Do not place hands in or on the drum unless engine is off and spark plug is disconnected.
 - **DANGER:** Do not smoke when refueling.
 - **WARNING:** Stay away from hot engine components during operation.
 - **WARNING:** Always attach safety chain when towing.
 - **WARNING:** Install, close, and secure all guards, shields and hoods before operating.

STOP!

ADD OIL TO ENGINE BEFORE USING: Engine is shipped without oil. **DO NOT** start engine without first adding oil.

INSPECT COMPONENTS: Closely inspect to make sure no components are missing or damaged.

See Initial Unpacking and assembly instructions and for whom to contact to report missing or damaged parts.

Any Questions, Comments, Problems or Parts Orders
Call BRAVE Product Support 1-800-350-8739

It is the OWNER’S RESPONSABILITY to communicate information on the
SAFE USE and OPERATION of this machine to the operators.

TABLE OF CONTENTS

1. Serial Number Location..... 3

2. Parts Ordering Procedure 3

3. Assembly Instructions 4-6

4. Safety Precaution 7-8

5. Safety Notice & Decals 8-9

6. Safety Decal Location 9-10

7. Before Operating..... 11

8. Operation Instruction..... 11-12

9. Adding Fluids and Towing 12

10. Service Instructions 13-14

11. Maintenance Schedule..... 15

12. Replacements..... 15

13. Torque Chart 16

14. Parts List Breakdown..... 17-23

14. Warranty 24

15. Warranty Registration..... 25

1. SERIAL NUMBER LOCATION

The model/serial number decal is located on the shroud assembly (cowl).

(Write model number)

(Write serial number)

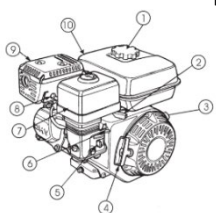
The unit year of manufacturing can be determined by its serial number. So, keep this information handy at all times, use your unit serial number when ordering parts.

This Unit warranty is stated in this Operational and Safety manual on page 22. Failure to return warranty registration card renders the warranty null and void.

An engine owner's manual is also attached to every unit. Engine parts must be ordered from an authorized HONDA dealer, or other if different than HONDA. Refer to the engine owner's manual to learn about specifications and part identification.

2. PARTS ORDERING PROCEDURE:

Parts must be ordered through your local dealer or by contacting Brave Customer Service at 800-350-8739. If you can't locate a local dealer in your area visit us online at www.braveproducts.com to locate the nearest dealer.



All HONDA warranties and parts ordering must be through your Honda dealers. Please visit <https://engines.honda.com/dealer-locator> for more information.

REMEMBER – You own the best Mixer. If repairs are needed, use only OEM purchased parts from authorized dealers.

ALWAYS HAVE READY:

1. Applicable model and serial number of machine(s).
2. Item part number(s), description, and quantity.

3. ASSEMBLY INSTRUCTIONS (MIXER STANDING ON END)

1. Fully unpack unit, cut straps, remove all cardboard, plastic wrap and all protecting packing material from unit.



You will see Mixer with:

- (2) Wheels
- (1) Axle with speed hubs and wheel lugs bolted on
- (2) Axle leaf attached into mixer frame
- (1) Towing hitch with quick pin and a hex bolt with nut

2. After unwrapping the mixer, locate the 2 loops on the bottom of the mixer, they should be attached to the spring leaves standard on the concrete mixer.



3. Remove the hex nuts on the U-Loops and place the axle through the loops then reinstall and tighten the hardware. The axle guides can be facing front or rear, make sure the axle guide is inside the U-Bolts before tightening.



4. Proceed to fasten wheel lug nut at no more than 105 ft. lbs.



5. Once wheels are fastened proceed to remove hardware that holds machine to pallet using a 9/16" wrench and/or deep socket.



6. Once pallet hardware is removed and using appropriate equipment, safely place the mixer upright on the tires/ground.



Warning: failure to use proper lifting equipment could cause mixer to fall and cause serious injury.

7. Install mixer 2" ball coupling, tow pole assembly into mixer receiver and install bolt & nut in the hole behind the receiver and the bolt & hairpin through the receiver.



Tow pole bolt & nut

Bolt & hairpin

One piece safety chain



4. SAFETY PRECAUTIONS

READ AND STUDY THE FOLLOWING SAFETY INFORMATION BEFORE ATTEMPTING TO OPERATE THIS EQUIPMENT. IN ADDITION, ENSURE THAT EVERY INDIVIDUAL WHO OPERATES OR WORKS WITH THIS EQUIPMENT IS FAMILIAR WITH THESE SAFETY PRECAUTIONS.

WARNING - LETHAL EXHAUST GAS!

An internal combustion engine discharges carbon monoxide, which is a poisonous and odorless invisible gas. Death or serious illness may result if inhaled. Operate only in an area with good ventilation.

NEVER IN A CONFINED AREA!

WARNING - DANGEROUS FUELS!

Use extreme caution when storing, handling and using fuels - they are highly volatile and explosive in the vapor state. Do not add fuel while engine is running. Stop and cool the engine before adding fuel.

DO NOT SMOKE WHEN REFUELING!

SAFETY GUARDS

It is the owner's responsibility to ensure **ALL GUARDS AND SHIELDS** are in place and in working order. **ELECTRICAL SHOCKS**, avoid contact with these components or their wiring.

SAFE DRESS - DO NOT WEAR loose clothing, rings, wristwatches, etc., near machinery.

NOISE PROTECTION

Wear O.S.H.A. specified hearing protection devices.

FOOT PROTECTION

Wear O.S.H.A. specified steel tip safety shoes.

HEAD PROTECTION

Wear O.S.H.A. specified safety helmets.

EYE PROTECTION

Wear O.S.H.A. specified eyes shields, safety glasses, and sweat bands.

DUST PROTECTION

Wear O.S.H.A. specified dust mask or respirator.

OPERATOR

Keep children and bystanders off and away from the equipment.



For details on safety rules and regulations in the United States, contact your local Occupational Safety and Health Administration (O.S.H.A.) office. Equipment operated in other countries must be operated and serviced in accordance and compliance with any and all safety requirements of such country. The publication of these safety precautions is done for your information does not by the publication of these precautions, imply or in any way represent that these are the sum of all dangers present near equipment. If you are operating this unit it is your responsibility to ensure that such operation is in full accordance with all applicable safety requirements and codes. All requirements of the United States Federal Occupational Safety and Health Administration Act must be met when operated in areas that are under the jurisdiction of that United States Department.

5. SAFETY NOTICE & DECALS



IMPORTANT NOTICE



The "SAFETY ALERT SYMBOL" is used to call attention to items or operations that may be dangerous to those operating or working with this equipment. These symbols can be found throughout the manual and on the unit itself. Please read these warnings and cautions carefully.

READ SAFETY DECALS CAREFULLY

Carefully read and follow all safety decals. Keep them in good conditions. If they become aged, replace as required. If repainting, **REPLACE ALL** decals. Decals are available from your authorized Distributors. Decals are not shown to scale.

CAUTION

**WHEN TOWING, ENSURE
DRAWBAR IS IN THE
MIDDLE POSITION.** 201012

CAUTION

**2-PERSON LIFT REQUIRED
TO POSITION MIXER
HITCH ON/OFF VEHICLE**

201155

IMPROPER OPERATION OF THIS EQUIPMENT CAN CAUSE SERIOUS INJURY OR DEATH. READ OPERATOR'S MANUAL SUPPLIED WITH THIS MACHINE BEFORE OPERATION OR SERVICING. MODIFICATION OR ALTERATION OF THIS MACHINE WILL VOID MANUFACTURER'S WARRANTY. DO NOT ALTER OR MODIFY THIS MACHINE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER.

WARNING

**ROTATING PART HAZARD
KEEP AWAY**

TO PREVENT SERIOUS INJURY OR DEATH ROTATING PARTS:

1. INSTALL, CLOSE AND SECURE ALL GUARDS, SHIELDS AND HOODS BEFORE OPERATING.
2. DO NOT PLACE HANDS IN DRUM UNLESS THE MOTOR OR ENGINE IS OFF AND THE POWER CORD UNPLUGGED OR THE KILL SWITCH ACTIVATED.
3. KEEP HANDS, FEET, HAIR AND LOOSE CLOTHES AWAY FROM MOVING PARTS.

201003

NOTICE

- ENSURE THE VEHICLE HAS TOWING CAPACITY FOR THE WEIGHT OF THIS MACHINE.
- DO NOT TOW MACHINE UNLESS THE DRAW BAR IS BOLTED IN PLACE AND THE SAFETY PIN IS SECURELY FASTENED.
- CLOSE ENGINE FUEL CUTOFF BEFORE TOWING MIXER TO PREVENT LEAKING OIL INTO ENGINE CRANKCASE.
- 2-PERSON LIFT PER UNIT TO POSITION MIXER ON VEHICLE.
- SECURELY ATTACH HITCH TO TOWING VEHICLE. ENSURE USE OF SAFETY PIN THROUGH LATCH OR HANDWHEEL FOR BALL TYPE HITCH.
- SAFETY CHAIN ATTACHMENT (SEE PICTURE) MUST CROSS UNDER THE DRAW BAR AND BE POSITIONED TO PREVENT THE DRAW BAR FROM DROPPING TO THE GROUND IN THE EVENT OF HITCH FAILURE.
- CONNECT LIGHTING PLUG/ELECTRIC BRAKE PLUG (WHEN APPLICABLE)
- MAKE CERTAIN THAT THE WHEEL LUG NUTS AND AXLE MOUNT HARDWARE IS TIGHTENED.
- CHECK PRESSURE AND OVERALL CONDITION OF TIRES.
- TEST BREAKS (IF APPLICABLE)

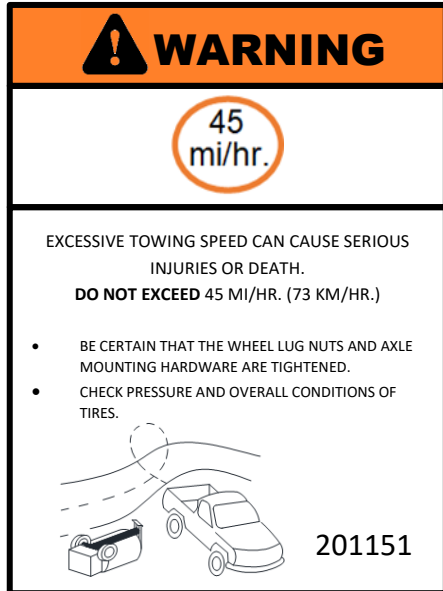
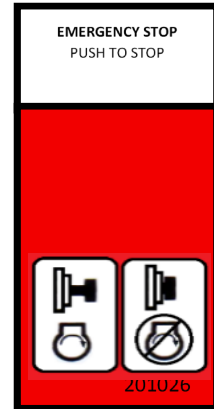
201150

WARNING

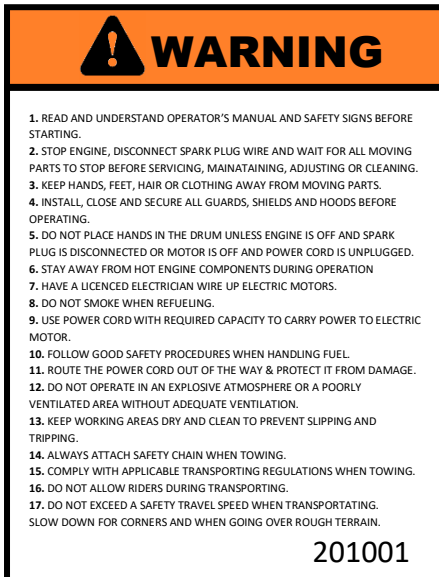
MISSING GUARD HAZARD

INSTALL, CLOSE AND SECURE ALL GUARDS, SHIELDS AND HOODS BEFORE OPERATING.

201004



6. SAFETY DECAL LOCATION

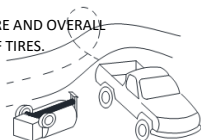


WARNING

45
mi/hr.

EXCESSIVE TOWING SPEED CAN CAUSE SERIOUS INJURIES OR DEATH.
DO NOT EXCEED 45 MI/HR. (73 KM/HR.)

- BE CERTAIN THAT THE WHEEL LUG NUTS AND AXLE MOUNTING HARDWARE ARE TIGHTENED.
- CHECK PRESSURE AND OVERALL CONDITIONS OF TIRES.



CAUTION

2-PERSON LIFT REQUIRED TO POSITION MIXER HITCH ON/OFF VEHICLE 201155

WARNING

1. READ AND UNDERSTAND OPERATOR'S MANUAL AND SAFETY SIGNS BEFORE STARTING.
2. STOP ENGINE, DISCONNECT SPARK PLUG WIRE AND WAIT FOR ALL MOVING PARTS TO STOP BEFORE SERVICING, MAINTAINING, ADJUSTING OR CLEANING.
3. KEEP HANDS, FEET, HAIR OR CLOTHING AWAY FROM MOVING PARTS.
4. INSTALL, CLOSE AND SECURE ALL GUARDS, SHIELDS AND HOODS BEFORE OPERATING.
5. DO NOT PLACE HANDS IN THE DRUM UNLESS ENGINE IS OFF AND SPARK PLUG IS DISCONNECTED OR MOTOR IS OFF AND POWER CORD IS UNPLUGGED.
6. STAY AWAY FROM HOT ENGINE COMPONENTS DURING OPERATION.
7. HAVE A LICENSED ELECTRICIAN WIRE UP ELECTRIC MOTORS.
8. DO NOT SMOKE WHEN REFUELING.
9. USE POWER CORD WITH REQUIRED CAPACITY TO CARRY POWER TO ELECTRIC MOTOR.
10. FOLLOW GOOD SAFETY PROCEDURES WHEN HANDLING FUEL.
11. ROUTE THE POWER CORD OUT OF THE WAY & PROTECT IT FROM DAMAGE.
12. DO NOT OPERATE IN AN EXPLOSIVE ATMOSPHERE OR A POORLY VENTILATED AREA WITHOUT ADEQUATE VENTILATION.
13. KEEP WORKING AREAS DRY AND CLEAN TO PREVENT SLIPPING AND TRIPPING.
14. ALWAYS ATTACH SAFETY CHAIN WHEN TOWING.
15. COMPLY WITH APPLICABLE TRANSPORTING REGULATIONS WHEN TOWING.
16. DO NOT ALLOW RIDERS DURING TRANSPORTING.
17. DO NOT EXCEED A SAFETY TRAVEL SPEED WHEN TRANSPORTING. SLOW DOWN FOR CORNERS AND WHEN GOING OVER ROUGH TERRAIN.

201001

WARNING



IMPROPER OPERATION OF THIS EQUIPMENT CAN CAUSE SERIOUS INJURY OR DEATH.
READ OPERATOR'S MANUAL SUPPLIED WITH THIS MACHINE BEFORE OPERATION OR SERVICING.
MODIFICATION OR ALTERATION OF THIS MACHINE WILL VOID MANUFACTURER'S WARRANTY.
DO NOT ALTER OR MODIFY THIS MACHINE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER.

CAUTION

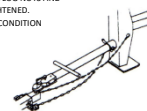
WHEN TOWING, ENSURE DRAWBAR IS IN THE MIDDLE POSITION. 201012

NOTICE



- ENSURE THE VEHICLE HAS TOWING CAPACITY FOR THE WEIGHT OF THIS MACHINE.
- DO NOT TOW MACHINE UNLESS THE DRAW BAR IS BOLTED IN PLACE AND THE SAFETY PIN IS SECURELY FASTENED.
- CLOSE ENGINE FUEL CUTOFF BEFORE TOWING MIXER TO PREVENT LEAKING OIL INTO ENGINE CRANKCASE.
- 2-PERSON LIFT PER UNIT TO POSITION MIXER ON VEHICLE.
- SECURELY ATTACH HITCH TO TOWING VEHICLE. ENSURE USE OF SAFETY PIN THROUGH LATCH OR HANDWHEEL FOR BALL TYPE HITCH. SAFETY CHAIN ATTACHMENT (SEE PICTURE) MUST CROSS UNDER THE DRAW BAR AND BE POSITIONED TO PREVENT THE DRAW BAR FROM DROPPING TO THE GROUND IN THE EVENT OF HITCH FAILURE.
- CONNECT LIGHTING PLUG/ELECTRIC BRAKE PLUG (WHEN APPLICABLE).
- MAKE CERTAIN THAT THE WHEEL LUG NUTS AND AXLE MOUNT HARDWARE IS TIGHTENED.
- CHECK PRESSURE AND OVERALL CONDITION OF TIRES.
- TEST BREAKS (IF APPLICABLE)

201150



CHECK LIST

- CHECK AND TIGHTEN WHEN NECESSARY ALL NUTS AND BOLTS.
- CHECK MIXER PADDLE AND WIPERS ADJUSTMENTS AND TIGHTEN PADDLE BOLTS.
- GREASE ALL FITTINGS – GREASE DRUM SEALS TO AVOID DOWN TIME ON REPAIRS.
- CHECK BELT ADJUSTMENT AND TIGHTEN BELT IF NECESSARY.
- CHECK TIRE PRESSURE. INFLATE 12" AND 13" TO 30 PSI. 8" TIRES TO 45 PSI.
- ENSURE THE DRUM LOCK AND HOOD FASTENER ARE IN LOCKED POSITION BEFORE TRANSPORTATION.

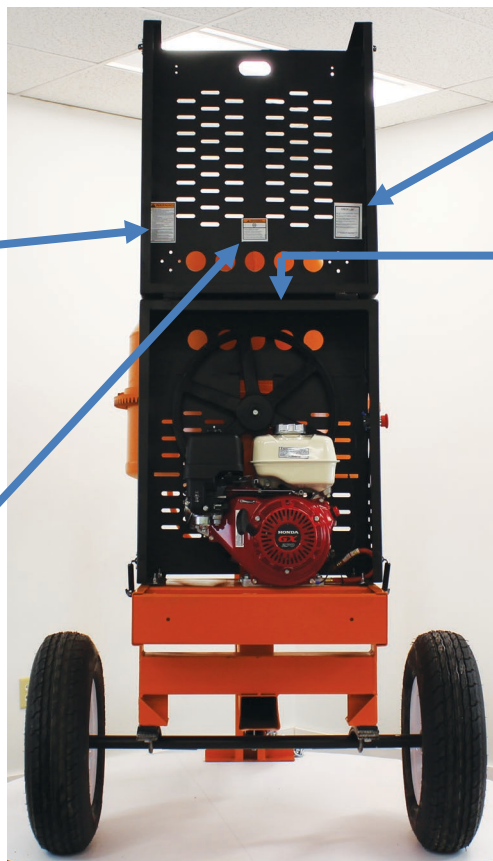
WARNING



ROTATING PART HAZARD KEEP AWAY

TO PREVENT SERIOUS INJURY OR DEATH ROTATING PARTS:

1. INSTALL, CLOSE AND SECURE ALL GUARDS, SHIELDS AND HOODS BEFORE OPERATING.
2. DO NOT PLACE HANDS IN DRUM UNLESS THE MOTOR OR ENGINE IS OFF AND THE POWER CORD UNPLUGGED OR THE KILL SWITCH ACTIVATED.
3. KEEP HANDS, FEET, HAIR AND LOOSE CLOTHES AWAY FROM MOVING PARTS. 201003



7. BEFORE OPERATING

- **REMEMBER!** It is the owner's responsibility to communicate information on the safe use and proper operation of this unit to the operators.
- Before operating, review SAFETY PRECAUTIONS listed on page 7 of this manual.
- Familiarize yourself with the operation of the unit and confirm that all controls function properly BEFORE starting engine.
- Locate the kill switch and assure you know how to STOP the unit.
- Make sure hands, feet, and clothing are at a safe distance from any moveable parts prior to starting.
- Shrouds and grids are provided to protect the operator or structures in close proximity to rotating hot engine parts. It is the **RESPONSIBILITY OF THE OPERATOR** to see that they are properly in place.
- OIL LEVEL - Check the oil level in the engine. For more information see "Lubrication" under the engine "Owner's Manual" the "Maintenance" section of this manual.
- **WARNING - All mixers come without oil. Running an engine without lubrication may damage the engine.**
- AIR CLEANER - Check to ensure elements are in good condition and properly installed.
- Review every decal with the OPERATOR.
- FUEL SUPPLY – Mixer engines require an automotive grade of clean, fresh, unleaded or regular gasoline. **All mixers come WITHOUT gasoline, oil or any other fluid.**
- LUBRICATION POINTS - Make sure all pillow blocks and drum's trunnions have been properly greased.

8. OPERATION INSTRUCTIONS

Prior to starting engine, make sure the mixer drum is locked to avoid mixer to flip over.

Check Gas engine

1. Open the fuel valve.
2. Pull the stop switch on the engine shroud to its "Out" position.
3. Move the engine throttle control to the "FAST" position.
4. Move Choke lever to the choke position, located on the engine.
(You may not need to choke if warm engine)
5. Pull the starter recoil briskly.
6. After the engine starts, move the choke lever to the open position, move the throttle level to the "IDLE" position and let the engine warm-up for one or two minutes.
7. Close the engine shroud

IMPORTANT

Engine warranty is void if the engine is run without oil.

**DO NOT OPERATE THE MIXER WITH THE SHROUD OPEN!**

1. Position drum at desired position before shoveling material inside the drum.
2. Follow the bag instruction if using a premix mix to get the desired consistency.
3. After discharging the final batch of mix, add water to the drum while the mixer is running. Discharge the water after to clean excess material.
4. Additional cleaning may be needed.

9. ADDING FLUIDS & TOWING

GAS ENGINE

1. Make sure drum is locked.
1. Turn the stop switch to the off position located on the engine shroud.
2. Close the fuel valve located on engine.
3. Add oil to continue operation / Drain oil if need oil change.
4. Add gasoline if needed.

**STOP THE ENGINE OR ELECTRIC MOTOR BEFORE:**

1. Adding fuel/Oil.
2. Leaving equipment unattended for any amount of time.
3. Making any repairs or adjustments to the unit.
4. Transportation.

IMPORTANT

The engine is supplied from the engine manufacture with the high idle speed set at approximately 3500 RPM and no gas or oil. As a result, the engine is not run when it is mounted to the Mixer. It is the responsibility of the customer to add oil and gas, start the engine and reset the high idle RPM to the operating range (Refer the Maintenance Section for procedure).

**BEFORE TOWING:**

1. Make sure the axle, wheels and tow bar hardware are tightened.
2. Check the condition of the pin on the tow bar and make sure it is secured.
3. Remove any loose debris from the mixer.
4. Use safety chains when towing.

TOWING:

1. Stop the engine or electric motor.
2. Close and hook the engine shroud.
3. Rotate the drum into the tow position and secured it with the locking pin.
4. Remove any loose debris from the mixer.
5. Secure the mixer hitch and safety chains to the vehicle.



MAXIMUM TOW SPEED: 45 mph (72 Km/h)

10. SERVICE INSTRUCTIONS

- Never service or lubricate the unit engine while running.
- After servicing the unit, restore and fasten all guards, shields, and covers to their original positions.
- Never drain oil into the ground, into open streams, or down sewage drains.

ENGINE

See engine owner's manual maintenance schedule.

If lost please visit <https://engines.honda.com/parts-and-support/owners-manuals> for more information.

ENGINE/DRUM RPM

The rotation speed of the Drum, for best efficiency, for your mixer is with a RPM of 28-30. It is the owner's preference, to have this be done with the Maximum Engine RPM Adjustment Screw or do this with the engine throttle control lever. Follow these steps to adjust maximum engine RPM, using the adjustment screw located on the throttle lever plate.



- 1) Use the Weld on the Drum as a point of reference to determine the Drum Speed (RPM)

- 2) Be certain engine has been serviced properly and start engine. Allow a short period to warm up, then pull throttle lever to max RPM.





3) Locate the Weld line of drum and with the engine running at high speed, and the drum turning, count the number of turns per minute.



4) Adjust the engine maximum high speed screw, to reach the desired drum rotation speed of 28-30 revolutions per minute, by turning this speed adjustment screw, located on the bracket of the throttle lever, just under the air cleaner cover. Turn left to increase engine RPM, turn right to decrease engine

DRUM

1. Wash the drum after every day's usage.
2. Tip the drum forward to drain water excess.
3. Leave mixer drum facing down to avoid rainwater, snow, dust or any other weather particles to get inside the mixer drum when not in use.
4. Secure with locking pin before moving mixer for towing or storing.

LUBRICATION

- Grease all fittings daily. All mixers have (2) pillow blocks with grease fittings on the mixer yoke, and (1) bearing on the outside bottom of the mixer drum.

11. MAINTENANCE SCHEDULE

	<i>Maintenance</i>	<i>Each use</i>	<i>Every 20 hours</i>	<i>Every 50 hours</i>	<i>Every 100 hours</i>	<i>Yearly</i>
Engine	Refer to engine operator/owner manual	X				X
Bearings	Grease	X				X
V-Belts	Check for excessive wear		X			X
Hardware	Check and tighten 1,2		X	X		X
Tires	Check air pressure	X				

- Check all hardware after the first 5 hours of use, then follow the maintenance schedule.
- Re-torque the front leg and axle hardware after the first 50 miles traveled, and then follow the maintenance schedule.

12. REPLACEMENT

Parts

Tolerance or Replacement Cycle

Engine Components

- ✓ Refer to your engine manufacturer's Owner's Manual

V-Belts

- ✓ Replace if stretched to the point that it slips and does not work properly. Replace the V-belts if they are cracked or torn.

Gears

- ✓ Replace if the teeth are cracked or have become sharp.

Hardware

- ✓ Re-torque all bolts after the first eight hours of operation and check hardware every 25 hours. Replace any worn or damaged hardware as needed. Replacement hardware should be grade 5 and zinc plated.

Safety Decals

- ✓ Replace if they become aged, damaged or cannot be easily read.

13. TORQUE CHART

APROXIMATE TIGHTENING TORQUE

<u>SIZE</u>	<u>GRADE 2</u>	<u>GRADE 5</u>	<u>GRADE 8</u>
# 10-24	21 in-lbs	32 in-lbs	45 in-lbs
# 10-32	23 in-lbs	36 in-lbs	51 in-lbs
1/4-20	49 in-lbs	76 in-lbs	9 in-lbs
1/4-28	56 in-lbs	87 in-lbs	10 in-lbs
5/16-18	8 in-lbs	13 in-lbs	18 in-lbs
5/16-24	9 in-lbs	14 in-lbs	20 in-lbs
3/8-16	15 in-lbs	23 in-lbs	33 in-lbs
3/8-24	17 in-lbs	26 in-lbs	37 in-lbs
7/16-14	24 in-lbs	37 in-lbs	52 in-lbs
7/16-20	27 in-lbs	41 in-lbs	58 in-lbs
1/2-13	37 in-lbs	57 in-lbs	80 in-lbs
1/2-20	41 in-lbs	64 in-lbs	90 in-lbs
9/16-12	53 in-lbs	82 in-lbs	115 in-lbs
9/16-18	59 in-lbs	82 in-lbs	129 in-lbs
5/8-11	73 in-lbs	112 in-lbs	159 in-lbs
5/8-18	83 in-lbs	112 in-lbs	180 in-lbs
3/4-10	129 in-lbs	223 in-lbs	282 in-lbs
3/4-16	144 in-lbs	200 in-lbs	315 in-lbs
7/8-9	125 in-lbs	322 in-lbs	454 in-lbs
7/8-14	138 in-lbs	355 in-lbs	501 in-lbs

APROXIMATE TIGHTENING TORQUE

<u>SIZE</u>	<u>GRADE 2</u>	<u>GRADE 5</u>	<u>GRADE 8</u>
1-8	188 ft-lbs	483 ft-lbs	682 ft-lbs
1-12	205 ft-lbs	529 ft-lbs	746 ft-lbs
1-14	210 ft-lbs	541 ft-lbs	764 ft-lbs
1-1/8-7	266 ft-lbs	596 ft-lbs	966 ft-lbs
1-1/8-12	297 ft-lbs	668 ft-lbs	1083 ft-lbs
1-1/4-7	375 ft-lbs	840 ft-lbs	1363 ft-lbs
1-1/4-12	415 ft-lbs	930 ft-lbs	1509 ft-lbs
1-3/8-6	491 ft-lbs	1102 ft-lbs	1787 ft-lbs
1-3/8-12	559 ft-lbs	1254 ft-lbs	2034 ft-lbs
1-1/2-6	652 ft-lbs	1462 ft-lbs	2371 ft-lbs
1-1/2-12	734 ft-lbs	1645 ft-lbs	2668 ft-lbs
M 6	3 ft-lbs	4 ft-lbs	7 ft-lbs
M 8	6 ft-lbs	10 ft-lbs	18 ft-lbs
M 10	10 ft-lbs	20 ft-lbs	30 ft-lbs

CONVERSIONS

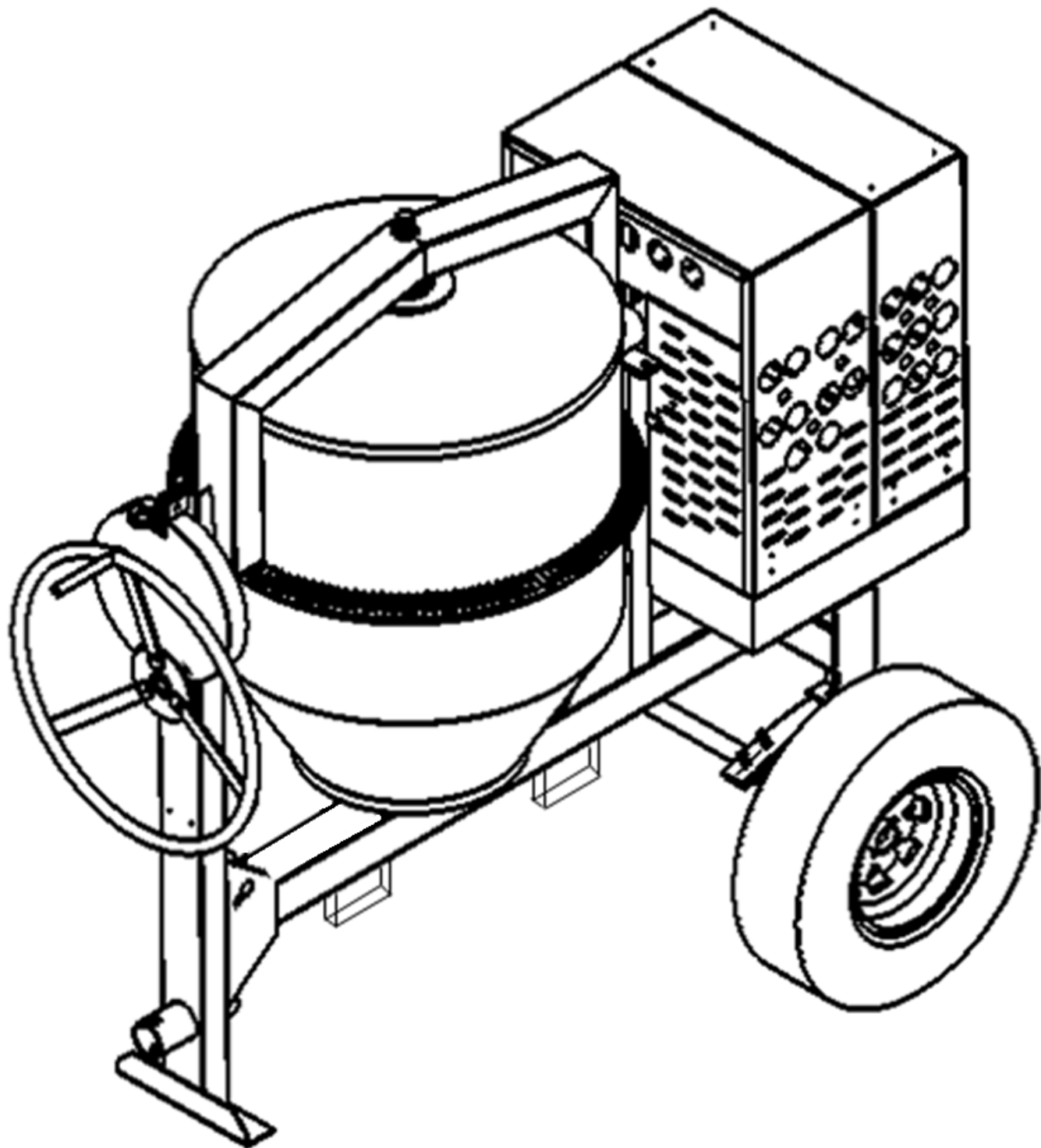
in - lbs x 0.083 = ft-lbs

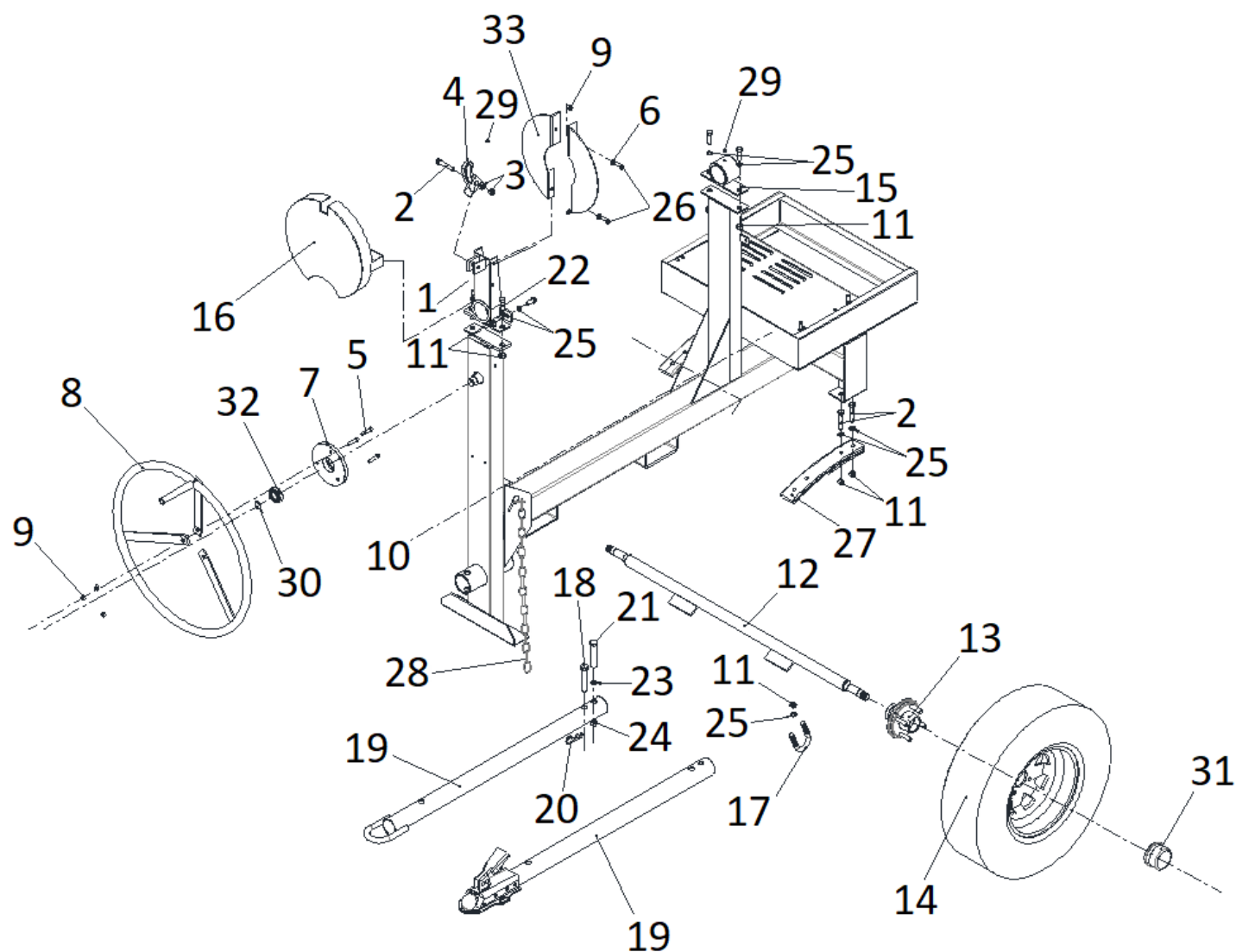
ft - lbs x 12 = in-lbs

ft - lbs x 0.1383 = kg-m

ft - lbs x 1.3558 = N-m

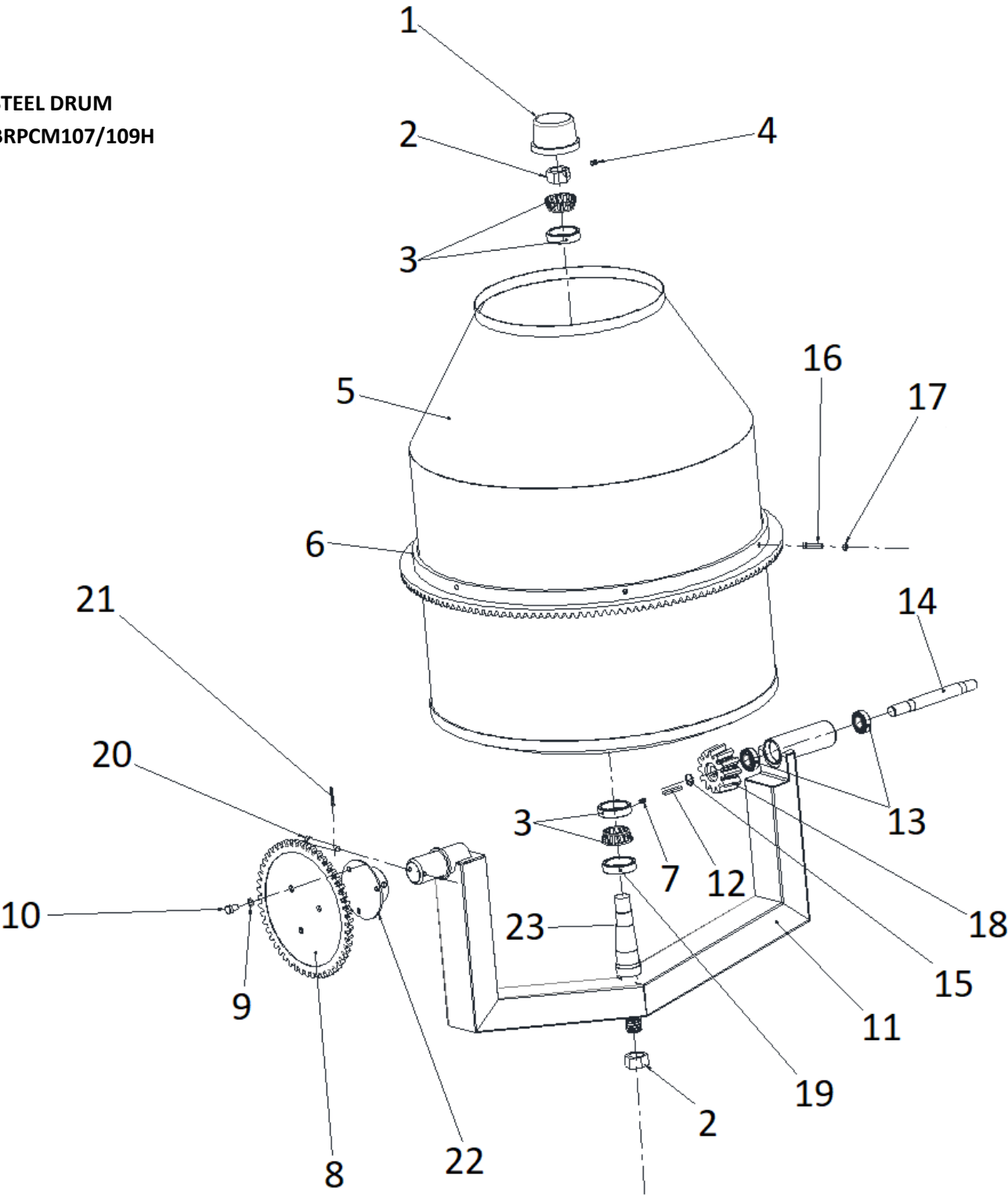
PARTS BREAKDOWN



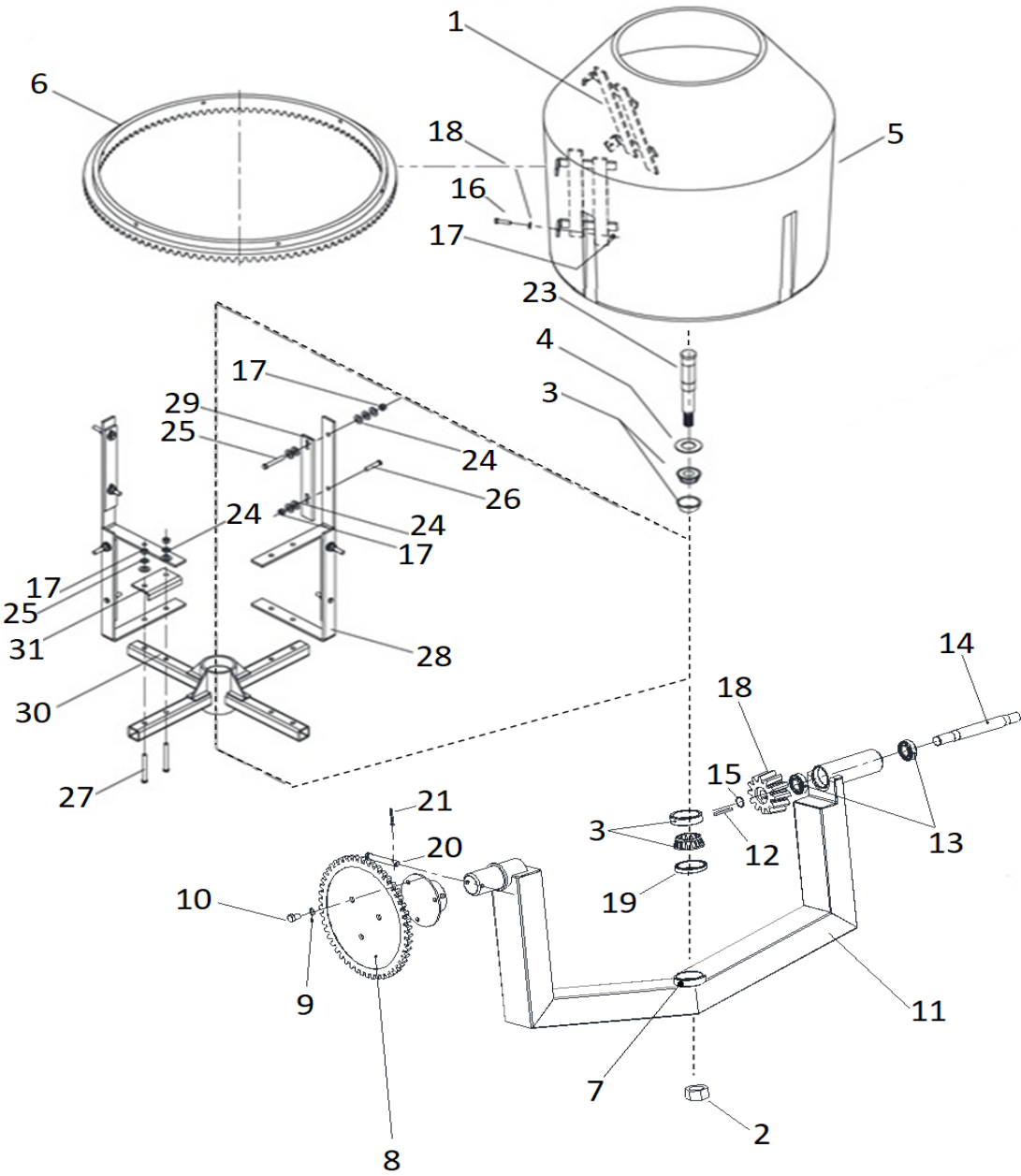


ITEM	PART #	DESCRIPTION	BRPCM107H	BRPCM109H	BRPCM209H
1	0100SC01FR	STEERING WHEEL BRAKE CM - C103	1	1	1
2	TOCD012212	HEX BOLT HD 1/2" X 2-1/2" - T104 - C146 - 226690	5	5	5
3	TCCN012GAL	HEX LOCK NUT 1/2" - T190 - C178	2	2	2
4	0100FG01FR	STEERING WHEEL LOCK PIN BREAK CM - C104	1	1	1
5	TOCD038112	HEX BOLT 3/8" X 1-1/2" - T176 - C141 - 226230	7	7	7
6	RNRX038GAL	LOCK WASHER 3/8" T113 - C144 - 176230	4	4	4
7	0101FG012H	CONTROL HANDLE BLOCK 5-15/16" E.D. X 1-1/4" W/6205 BRG	1	1	1
8	0103SC01VO	STEERING WHEEL HANDLE W/ ROTABLE HANDLE ALL CM - C111			
9	TCCS038GAL	HEX LOCK NUT 3/8" - 227830 - T114 - C142	3	3	3
10	0113CO01CH	T-TYPE FRAME ALL CM MODELS 2019 - C110-1	1	1	1
11	TCCS012GAL	HEX LOCK NUT 1/2" - T106 - 227854 - C304	12	12	12
12	0130SC02RD	AXLE, ASSY INCLUDES HUBS - 702058 - C134 - C195	1	1	1
13	0200KI03RD	WHEEL HUB W/ 1" BRG L44643 & DUST CAP - 702071 - T129 - C135	2	2	2
14	0000CO02RD	WHEEL & TIRE ASSY 4.8 X 12" - T137-12 - C137- 431063	2		
14	0000CO01RD	WHEEL & TIRE ASSY 165-80 R13" - T137 - 431081 - C136		2	2
15	0113CO01PT	DRUM YOKE PILLOW BLOCK - C105-1 (FOR T-FRAME)	1	1	1
16	0170CO01GF	CONTROL HANDLE SAFETY GEAR GUARD CM - C157	1	1	1
17	0170CO03CH	CM/HM AXLE U-CLAMP C166 - 0900CR02RD - 702059	2	2	2
18	0000CR01LZ	TOWING HITCH, LOCK PIN - T121 - C169 - 496088 - 702078	1	1	1
19	0000CO04LZ	2" BALL HITCH VERTICAL HOLE - 702070 - T119	1	1	1
19	0000CO03LZ	PINTLE HITCH VERTICAL HOLE - 702069 - T118 - C193	1	1	1
20	0111SR01LZ	3/6" COTTER PIN CP-85H - SR00036EXT - T110 - 134955	1	1	1
21	TOFD034312	TOWING HITCH, HEX HEAD SCREW 3/4" X 3-1/2" - T122 - C148	1	1	1
22	TOCD012112	HEX BOLT HD GR5 1/2" X 1-1/2" - 226650 - C303 - T595	2	2	2
23	RNRX034GAL	TOWING HITCH, SPRING WASHER 3/4" - 174510 - T123	1	1	1
24	TCFN034GAL	TOWING HITCH, HEX NUT, 3/4 NF - 701028 - T124 - C179	1	1	1
25	RNRX012GAL	SPRING WASHER 1/2" - C145 - 176250 - T568 - T112	3	3	3
26	TOCD038100	HEX BOLT 3/8 X 1 - C138 - 226210 - T116	4	4	4
27	0000RF03CH	SET AXLE LEIFS SPRINGS FOR CM - C165	OPT	2	2
28	CAD3516GAL	5/16 SAFETY CHAIN W/ OVAL SNAPS T501 - 609686 - 701012 - CA03316GAL	1	1	1
29	0000GRH200	FTG, GREASE ST 1/8 NPT - 110680 - C15	2	2	2
30	SM00156EXT	RETAINING OMEGA RING - 1-15/16" - 701029 - C151	1	1	1
31	0000RF10RD	DUST CAP FOR WHEEL HUBS 1.98" (NEW STYLE) - 702087 - T136-1 - 464804	2	2	2
32	0000BA6205	BALL BEARING, 6205 - C154 - 701016 (JEL205-100W3)	1	1	1
33	0113LA01YU	CONTROL HANDLE GEAR GUARD REAR CM (BOTH ENDS) T-FRAME	1	1	1

STEEL DRUM
BRPCM107/109H

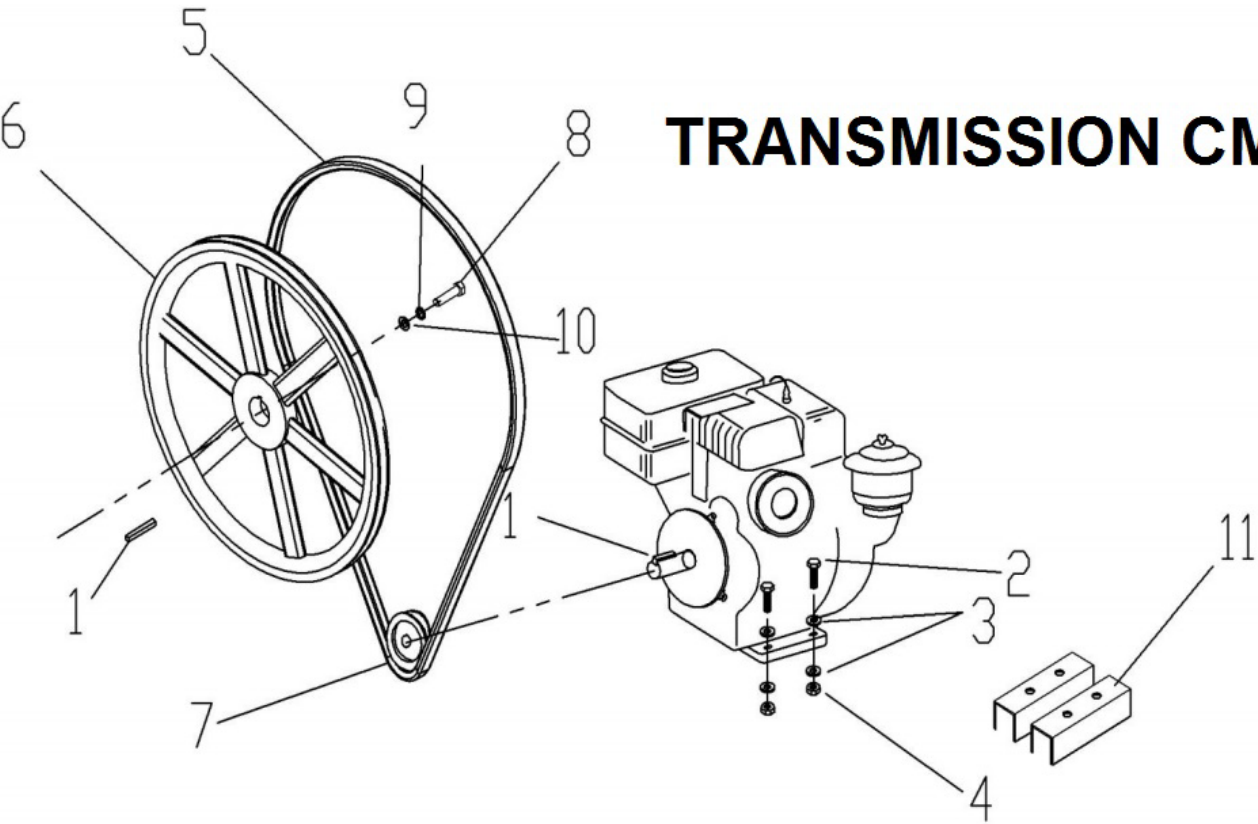


ITEM	PART #	DESCRIPTION	BRPCM107H	BRPCM109H
1	0100FG01TQ	CM INSIDE DRUM CAP - C118 - 702033	1	1
2	TCCN138MAQ	HEX NUT, 1-3/8" - C117 - 701013	2	2
3	0000BA2788	BALL BEARING, TRB CO&SL 4T-LM67048L (W/ CUP BA2788/20) - C150 - 701014	2	2
4	OPCR038012	ALLEN SCREW 3/8 X 1/2 - 702072 - C116	1	1
5	0171CO01TQ	DRUM CM7/C6 (WITH WELDED PADDLES) - C119 - 702037	1	
5	0172CO01TQ	DRUM CM9/C9 (WITH WELDED PADDLES) - C120 - 431479		1
6	0100FG02TQ	RING GEAR (115 TH 32-7/8" DIA) ALL CM - C122 - 702040	1	1
7	0000GRH200	FTG, GREASE ST 1/8 NPT - 110680 - C155	1	1
8	0100FN01YU	STEERING WHEEL GEAR (DUCTILE CASTING) FOR CM - C107-1	1	1
9	RNRX012GAL	SPING WASHER 1/2" - C145 - 176250 - T568 - T112	3	3
10	TOCD012034	HEX BOLT GR5 1/2 X 3/4 - C149	3	3
11	0113CO02YU	DRUM YOKE CM7 & CM9 - C112 (T- FRAME)	1	1
12	0170CC01MO	KEY 1/4 X 1-1/4 - 701027 - C152 - T483 - 0000CU01TR	1	1
13	0000BA6205	BALL BEARING, 6205 - C154 - 701016 (JEL205-100W3)	2	2
14	0100CR02YU	TRANS. SHAFT CM SHAFT 1 1/16 X 9 3/4" - C124 - 411894	1	1
15	SM00156EXT	RETAINING OMEGA RING - 1-15/16" - 701029 - C151	2	2
16	TOCD038112	HEX BOLT 3/8" X 1-1/2" - T176 - C141 - 226230	9	9
17	TCCS038GAL	HEX LOCK NUT 3/8" - 227830 - T114 - C142	19	19
18	0100FG02YU	PINION 12 TOOTH (FOR NEW CM) - 702068 - C123	1	1
19	0100RF01TQ	CM DRUM BOTTOM SHAFT SEAL TC38X80X8 - C532	1	1
20	TOCD012400	HEX HEAD CAP SCREW 1/2 X 4"	1	1
21	SC018112NOR	COTTER PIN 1/8 X 1-1/2"	1	1
22	0113CO01YU	CM-T YOKE HANDLE BLOCK/FLANGE	1	1
23	0113CR01YU	DRUM SHAFT CM-T	1	1



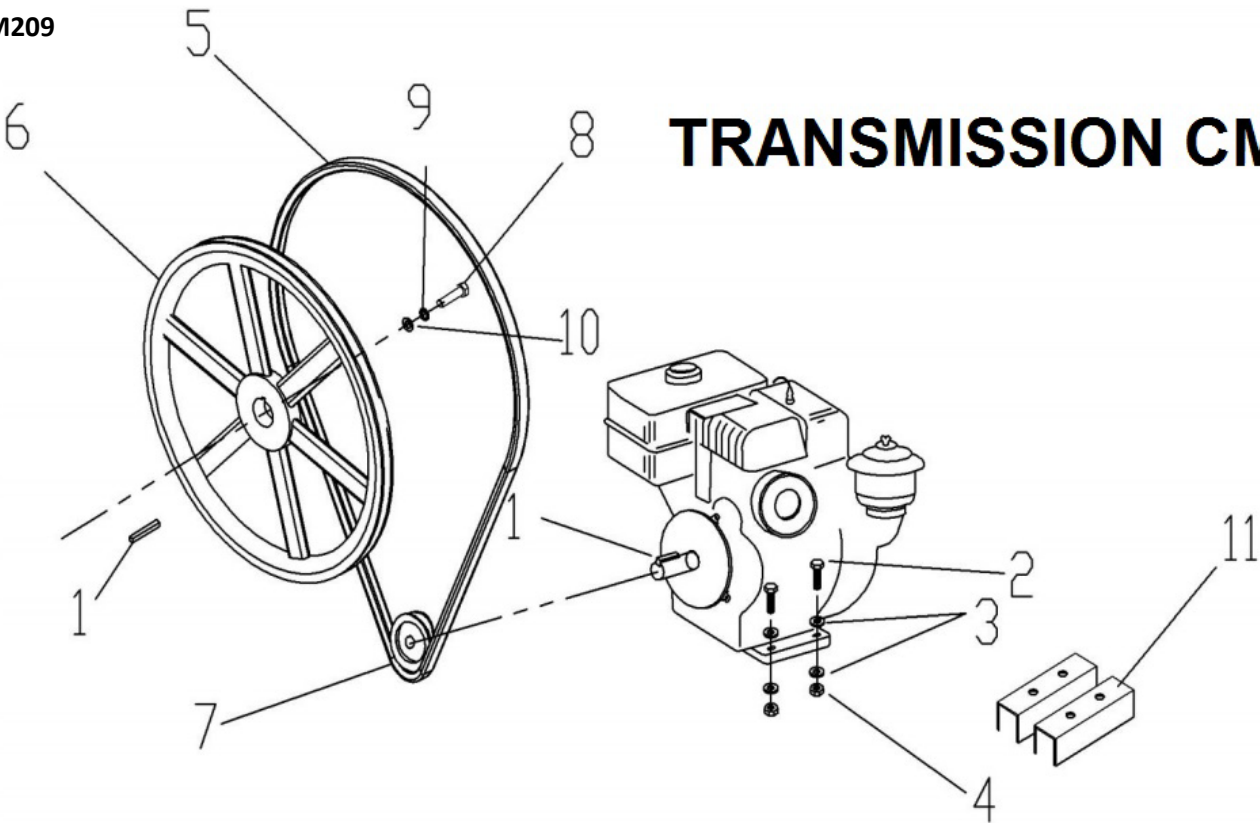
ITEM	M.I.D. #	DESCRIPTION	BRPCM209H
1	0100SC01AS	PADDLE C3/C6P/C9P/CM9P - 702107 - C505 - 412010	6
2	TCCN138MAQ	HEX NUT, 1-3/8" - C117 - 701013	2
3	0000BA2788	BALL BEARING, TRB CO&SL 4T-LM67048L (W/ CUP BA2788/20) - C150 - 701014	2
4	0100LA03TQ	DRUM BOTTOM DRIVE SHAFT PLATE C9P - 702046 - C114	1
5	0906CO01TQ	DRUM C9P/CM9P INCLUDES PADDLES - 702085 - C504 - C191	1
5	0111CO01EF	C9P/CM9P DRUM KIT ASSEY (DRUM, PADDLES, YOKE, RING) - C522 - 609936 - 610502	1
6	0100FG02TQ	RING GEAR (115 TH 32-7/8" DIA) ALL CM - C122 - 702040	1
7	0000GRH200	FTG, GREASE ST 1/8 NPT - 110680 - C155	1
*8	0100FG01YU	STEERING WHEEL GEAR FOR CM - C107	1
8	0100FN01YU	STEERING WHEEL GEAR (DUCTILE CASTING) FOR CM - C107-1	1
9	RNRX012GAL	SPRING WASHER 1/2" - C145 - 176250 - T568 - T112	3
10	TOCD012034	HEX BOLT GR5 1/2 X 3/4 - C149	3
11	0111CO01YU	YOKE CM9P - C520	1
12	0170CC01MO	KEY 1/4 X 1-1/4 - 701027 - C152 - T483 - 0000CU01TR	1
13	0000BA6205	BALL BEARING, 6205 - C154 - 701016 (JEL205-100W3)	2
14	0100CR02YU	TRANS. SHAFT CM SHAFT 1 1/16 X 9 3/4" - C124 - 411894	1
15	SM00156EXT	RETAINING OMEGA RING - 1-15/16" - 701029 - C151	2
16	TOCD038112	HEX BOLT 3/8" X 1-1/2" - T176 - C141 - 226230	9
17	TCCS038GAL	HEX LOCK NUT 3/8" - 227830 - T114 - C142	19
18	RNPX038GAL	PLAIN WASHER 3/8" - T112 - C139 - 174986 - 701032 - C140	20
19	0100RF01TQ	CM DRUM BOTTOM SHAFT SEAL TC38X80X8 - C532	1
20	TOCD012400	HEX HEAD CAP SCREW 1/2 X 4"	1
21	SC018112NOR	COTTER PIN 1/8 X 1-1/2"	1
22	0113CO01YU	CM-T YOKE HANDLE BLOCK/FLANGE	1
23	0113CR01YU	DRUM SHAFT CM-T	1
24	RNPX012GAL	PLAIN WASHER 1/2" - T105 - C172 - 174470	36
25	TOCD038212	HEX BOLT HD, 3/8" X 2-1/2 - T590 - 226270	4
26	TOCD038134	HEX BOLT HD, 3/8 X 1-3/4 - 226240	4
27	TOCD038312	HEX BOLT HD, 3/8" X 3-1/2" - T353 - 226275	8
28	0100SO02AD	BRACKET SUPPORT ARM CM9P - C529 - 702122 - 0100SO02AD	4
29	0110SO01AD	BRACKET SUPPORT INNER CM6P/C6P - C531 - 702123 - 0110SO01AD	4
30	0111CO01TQ	DRUM SUPPORT REINFORCED C9P/CM9P - C508 - 702120 - 0100CO01AD	1
31	0100PL03AD	CLAMP DRUM SUPPORT CM6P/CM9P - C525 - 702121	4

STEEL DRUM
BRPCM107/109H



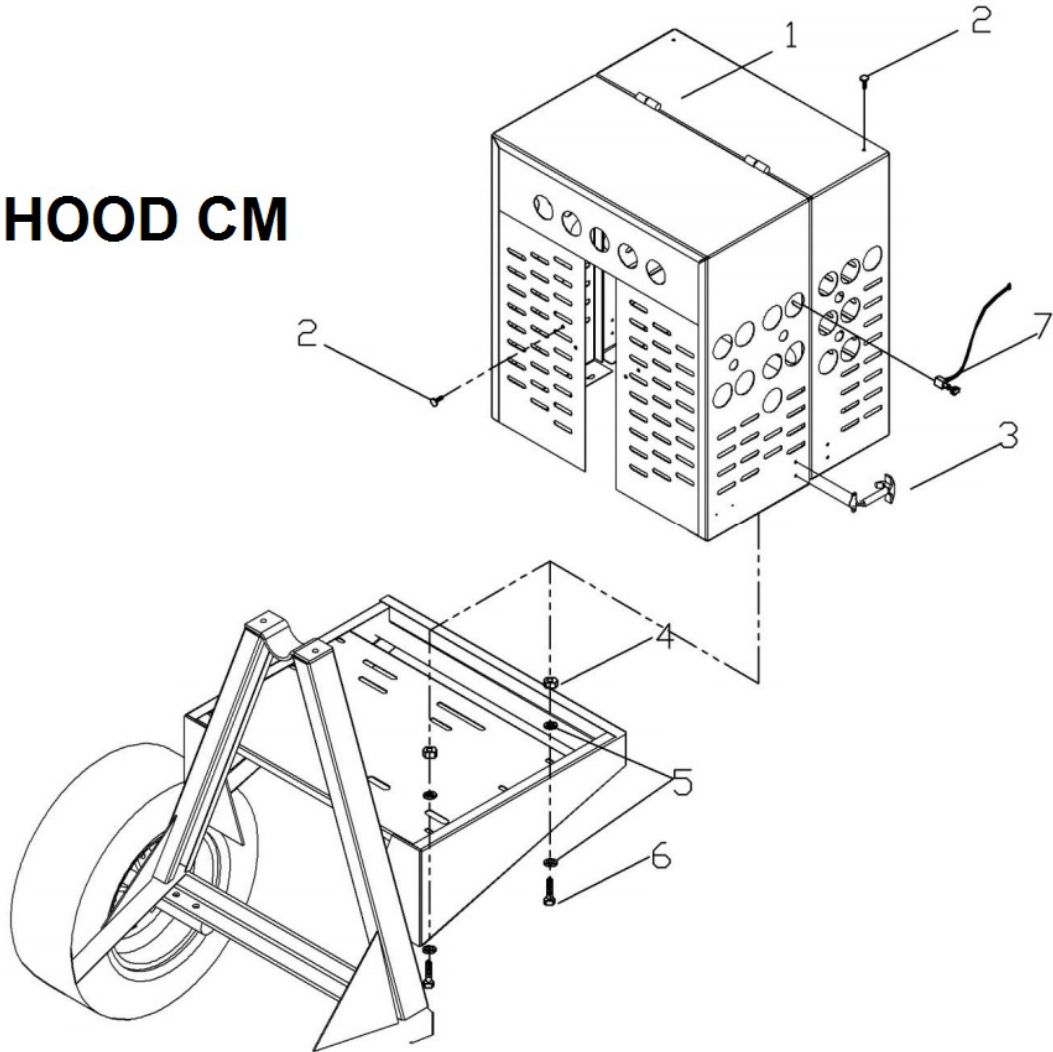
TRANSM ASSEY				
ITEM	PART #	DESCRIPTION	BRPCM107H	BRPCM109H
*	GX270	HONDA ENGINE GX270	1	1
1	0200CU02TR	ENGINE KEY 1/4 FOR GAS ENGINE - T147	1	1
2	TOCD038200	BOLT HEXHD, 3/8" X 2" FOR HONDA ENGINES	4	4
3	RNPX038GAL	PLAIN WASHER 3/8"	8	8
4	TCCS038GAL	HEX HEAD LOCK NUT 3/8"	4	4
5	0000BNB64	PULLEY DRIVE BELT B64 FOR GAS ENGINE	1	1
6	POFG190516TK	1 GROOVE TRANSMISSION PULLEY 19"	1	1
7	POFG212100	ENGINE PULLEY 2-1/2" CAL 1" (GAS ENGINE)	1	1
8	TOCD038100	TRANSMISSION PULLEY HEX BOLT HD 3/8" X 1"	1	1
9	RNPX038GAL	PLAIN WASHER 3/8"	1	1
10	0170LA01TR	TRANSMISSION PULLEY WASHER 3/8"	1	1

POLY DRUM
BRPCM209



TRANSMISSION CM

TRANSM ASSEY			
ITEM	PART #	DESCRIPTION	BRPCM209H
*	GX270	HONDA ENGINE GX270	1
1	0200CU03TR	KEY, 3/16" X 1-1/2" FOR 8-13HP ENGINE	1
2	TOCD038200	BOLT HEXHD, 3/8" X 2" FOR HONDA ENGINES	4
2	TOCD038100	BOLT HEXHD, 3/8" X 1" FOR ELECTRIC MOTORS	4
3	RNPX038GAL	PLAIN WASHER 3/8"	8
4	TCCS038GAL	HEX HEAD LOCK NUT 3/8"	4
5	0000BNB64	PULLEY DRIVE BELT B64 FOR GAS ENGINE	1
5	0000BNB68	PULLEY DRIVE BELT B68 FOR ELECTRIC MOTOR	1
6	POFG190516TK	1 GROOVE TRANSMISSION PULLEY 19"	1
7	POFG212100	ENGINE PULLEY 2-1/2" CAL 1" (8 HP -13 HP ENGINE)	1
7	POFG212078	ENGINE PULLEY 2-1/2" CAL 7/8" KEY 3/16"(2 HP MOTOR)	1
7	POFG212118	ENGINE PULLEY 2-1/2" CAL 1 1/8" KEY 1/4" (3 HP - 5HP MOTOR)	1
8	TOCD038100	TRANSMISSION PULLEY HEX BOLT HD 3/8" X 1"	1
9	RNPX038GAL	PLAIN WASHER 3/8"	1
10	0170LA01TR	TRANSMISSION PULLEY WASHER 3/8"	1



HOOD ASSEY BREAK					
ITEM	PART #	DESCRIPTION	BRPCM107H	BRPCM109H	BRPCM209H
1	0110CO01GA	SQUARE SHROUD ASSEY COMPLETE	1	1	1
2	0000RF01GA	SHROUD RUBBER SCREW 1/4"	2	2	2
3	0000RF02GA	SHROUD SPRING LOADED HOOK ASSEMBLY	2	2	2
4	TCCS038GAL	HEX HEAD LOCK NUT 3/8"	4	4	4
5	RNPX038GAL	PLAIN WASHER 3/8"	8	8	8
6	TOCD038112	HEX HEAD CAP SCREW 3/8" X 1-1/2"	4	4	4
7	0200KI01GA	SHROUD ASSEMBLY PUSH STOP WITH ENGINE HARNESS	1	1	1
7	816769AS NO	ENGINE KILL SWITCH (NO HARNESS) - 816769AS RED	1	1	1
7	0000RF04GA	ENGINE KILL SWITCH (NO HARNESS) BLACK	1	1	1



Dear Valued Customer:

The Brave product you just purchased is built with the finest material and craftsmanship. Use this product properly and enjoy the benefits from its high performance. By purchasing a Brave product, you show a desire for quality and durability. Like all mechanical equipment this unit requires a due amount of care. Treat this unit like the high-quality piece of machinery it is. Neglect and improper handling may impair its performance.

Thoroughly read the instructions and understand the operation before using your product. Always contact Brave Product Support at 1-800-350-8739 prior to having any service or warranty work performed, as some services performed by parties other than Brave approved service centers may void this warranty. This limited warranty is in lieu of any other warranty expressed or implied, written or oral and Brave assumes no other responsibility or liability outside that expressed within this limited warranty.

Limited Warranty for Brave Mixers:

Models:

BRPMM106H

BRPMM108H

BRPMM206H

BRPMM208H

BRPCM107H

BRPCM109H

	Consumer Warranty Period	Commercial Warranty Period
Weldments		
	1 years from date of purchase by user	1 year from date of purchase by user
Bearings & Seals		
	Brave mixers offer a Lifetime warranty on Bearings & Seals. The obligation under this warranty is limited to the replacement of parts from your local Brave dealer or contacting Brave directly	
Wear Parts		
	In addition to the normal warranty, Brave shall warrant some normal wear items from defects in material or workmanship for a period of 30 days from the date of purchase by user. Normal wear items covered under this warranty are limited to: High impact wear related components, such as standard retention hardware for wear items, paddle wipers (Mortar Mixer), belts, gears, axle bearing, tires, switches. Routine maintenance items such as lubricants, belt adjustments, tune ups are not covered under warranty.	
Engines		
	The engine warranty is covered under the terms and conditions as outlined by the engine manufactures warranty contained herein and is the sole responsibility of the engine manufacturer. Normal engine maintenance such as spark plugs, oil changes, air filters, adjustments, fuel system cleaning and obstruction due to build up is not covered by this Brave limited warranty.	

“Consumer use” means personal residential household use by a consumer. **“Commercial use”** means all other uses, including, but not limited to, use for commercial, income producing or rental purposes or when purchased by a business.

This limited warranty applies to the original purchaser of the equipment (verification of purchase, in the form of a receipt, is the responsibility of the buyer), is non-transferable, and covers parts and labor. Parts will be replaced or repaired at no charge, except when the equipment has failed due to lack of proper maintenance. If a part is no longer available, the part may be replaced with a similar part of equal function. Any misuse, negligence, abuse, accidents, alteration or improper installation or operations will void warranty. Machines altered or modified without a Brave written consent may void this warranty policy immediately. This warranty shall apply to machines repaired by authorized Brave dealers only. Brave reserves the right to inspect and determine whether a part is to be replaced or repaired and is the sole decision of Brave. Brave will not provide for replacement of complete products due to defective parts. Any costs incurred due to replacement or repair of items outside of a Brave approved facility is the responsibility of the buyer and not covered under warranty. Transportation costs to and from service center and/or service calls are the responsibility of the customer. Brave reserves the right to improve or make product changes without incurring any obligation to update, refit or install on machines previously sold. Warranty requests must be submitted in writing within 30 days after machine.

This limited warranty specifically excludes the following; failure of parts due to damage caused by accident, fire, flood, windstorm, acts of God, applications not approved by Brave in writing, corrosion caused by chemicals, use of replacement parts which do not conform to manufacturer’s specifications, damage related to rodent and/or insect infestation and damage caused by vandalism. Additional exclusions: loss of running time, inconvenience, loss of income, or loss of use, including any implied warranty of merchantability of fitness for a specific use. Also, outdoor power equipment needs periodic parts and service to perform well, and this limited warranty does not cover instances when normal use has exhausted the life of a component or the engine.

This limited warranty does not cover any liability, personal injury or damage to surrounding property caused by failure of any part, misuse or inability to use the product, design, material or operation of unit. Alteration of the product, including safety features, shall void this warranty.

Repair or replacement of parts does not extend the warranty period. This limited warranty gives you specific legal rights. You may also have other rights that vary by state. Please have model number, item number and serial number on hand prior to making a warranty claim or inquiry.

For products purchased on or after October 1, 2019 | Rev 1

BRAVE

Brave Product Registration Form

YOUR INFORMATION

Full Name:

Last

First

M.I.

Address:

Street Address

Apartment/Unit #

City

State

ZIP Code

Home Phone:

Alternate
Phone:

Email

PURCHASED FROM

Company:

Address:

Street Address

Apartment/Unit #

City

State

ZIP Code

MODEL INFORMATION

Purchase Date

Application Type

☐ Homeowner

☐ Commercial

☐ Rental

Model (i.e. BRPT704H)

Serial # (i.e. 123456)

Signature

Register your product online at www.braveproducts.com

BRAVE

A GNE BRAND

BRAVE

A Brand of:

Great Northern Equipment Distributing, Inc.

20195 S. Diamond Lake Road, STE 100

Rogers, MN 55374