



Technical Manual

PGM 22 InCommand™

63280 – PGM 22, 11 Blade Reel
63286 – PGM 22, 15 Blade Reel

 **WARNING**

WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.



When Performance Matters.™



RJL 100 August 2014

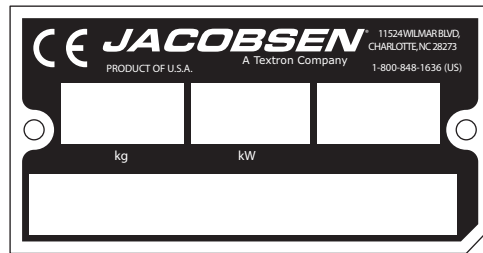
FOREWORD

This manual contains safety, operating, adjustment, maintenance, troubleshooting instructions and parts list for your new Jacobsen machine. This manual should be stored with the equipment for reference during operation.

Before you operate your machine, you and each operator you employ should read the manual carefully in its entirety. By following the safety, operating and maintenance instructions, you will prolong the life of your equipment and maintain its maximum efficiency.

If additional information is needed, contact your Jacobsen Dealer.

The serial plate is located on the rear crossbar of the frame. Jacobsen recommends you record these numbers below for easy reference.



Suggested Stocking Guide

To Keep your Equipment fully operational and productive, Jacobsen suggests you maintain a stock of the more commonly used maintenance items. We have included part numbers for additional support materials and training aids.

To order any of the following material:

1. Write your full name and complete address on your order form.
2. Explain where and how to make shipment:
 - UPS
 - Regular Mail
 - Overnight
 - 2nd Day

3. Order by the quantity desired, the part number, and the description of the part.
4. Send or bring the order to your authorized Jacobsen Dealer.

Service Parts

Qty.	Part No.	Description	Qty.	Part No.	Description
	5002605	11 Blade Reel		164056	Brake Band
	503477	22" High Profile Bedknife		366648	Seal, Grease
	503478	22" Low Profile Bedknife		3006511	Washer
	503479	22" Tournament Bedknife		337677	Seal, Oil
	5002887	22" Super Tournament Bedknife			

Service Support Material

Qty.	Part No.	Description
	4131595	Technical Manual
	4191633	Operator Training Video

Qty.	Part No.	Description
	4171663	Service Manual

These are the original instructions verified by Jacobsen, A Textron Company.

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Proposition 65 Warning

This product contains or emits chemicals known to State of California to cause cancer and birth defects or other reproductive harm.

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1 SAFETY

1.1 HOW TO OPERATE SAFELY



EQUIPMENT OPERATED INCORRECTLY OR WITHOUT TRAINING CAN BE DANGEROUS.

Know the location and correct operation of controls. Operators without experience must receive instruction from another person that knows the correct operation of the equipment before you operate the mower.

Only use parts, accessories and attachments approved by Jacobsen.

SAFE OPERATION

- a Read the Operator's Manual and other training material. If the operator or technician can not read this manual, the owner is responsible to describe this material to the operators and technicians. Manuals in additional languages may be available on the Jacobsen or RansomesJacobsen website.
- a Read all of the instructions for this mower carefully. Know the controls and the correct operation of the equipment.
- b Children or persons who do not understand these instructions must not use the mower. The local regulations can limit the age of the operator.
- c Never use a mower near persons, including children or animals.
- d Remember that the operator or owner is responsible for accidents or hazards that occur to other persons or their property.
- e Never carry passengers.
- f Never allow persons to operate or service the mower or its attachments without correct instructions.
- g Do not operate equipment while tired, sick or after you use alcohol or drugs.

PREPARATION

- a When you operate the mower, wear correct clothing, slip resistant work shoes or boots, work gloves, hard hat, safety glasses and hearing protection. Long hair, loose clothing or jewelry can be caught in moving parts.
- b Do not operate the equipment with the Interlock System disconnected or the system does not operate correctly. Do not disconnect or prevent the operation of any switch.
- c Never operate equipment that is not in correct order or without decals, guards, shields, deflectors or other protective devices fastened.

- d Inspect the mower before you operate the mower. Check the tire pressure, engine oil level, the radiator coolant level and the air cleaner indicator. Fuel is flammable. Use caution when you add the fuel to the mower.
- e Operate the mower in daylight or in good artificial light. Use caution when you operate the mower during bad weather. Never operate the mower with lightning in the area.
- f Inspect the area to select the accessories and attachments that are needed to correctly and safely do the job. Only use parts, accessories and attachments approved by Jacobsen.
- g Be careful of holes in the terrain and other hazards that are not visible.
- h Inspect the area where the equipment is operated. Remove all objects you can find before you operate. Be careful of obstructions above the ground (low tree limbs, electrical wires) and also underground obstacles (sprinklers, pipes, tree roots). Enter a new area carefully. Look for possible hazards.
- i Inspect the cutting system before you start the mower. Make sure the blades are free to rotate. When you rotate one blade, other blades can rotate.

OPERATION

- a Never operate the engine without enough ventilation or in an enclosed area. The carbon monoxide in the exhaust fumes can increase to dangerous levels.
- b Never carry passengers. Keep other persons or animals away from the mower.
- c Disengage all drives and engage the parking brake before you start the engine. Only start the engine with the operator in the seat. Never start the engine with persons near the mower.
- d Keep your legs, arms and body inside the operator compartment while the mower is in operation. Keep your hands and feet away from the cutting units.

- e Do not use on the slopes greater than the safe slope limit for the equipment.
- f To guard against over turning or loss of control:
 - Operate the mower across the face (horizontally), but not up and down on the face of slopes (vertically).
 - Do not start or stop suddenly on slopes.
 - Decrease the speed when you operate on slopes or when you must turn. Use caution when you change direction. Turf condition can change the mower stability.
 - Use caution when you operate the mower near drop-offs, ditches or embankments.
 - Be careful of holes in the terrain and other hazards that are not visible.
- g Always operate at speeds that allow you to have complete control of the machine. Make sure of your footing keep a tight grip the handle and walk. Never run when you operate the mower.
- h Use caution when you go near corners, trees or other objects that can prevent a clear view.
- i Equipment must meet the current regulations to be driven on the public roads.
- j Before you move across or operate on the paths or roads, turn off the PTO switch, lift the mowers and travel at decreased speed. Look for traffic.
- k Stop the blades when the mower is on any surface that is not grass.
- l Do not release the cut grass in the direction of persons or allow persons near the mower while in operation.
- m Do not operate the mower with damaged guards or without safety devices in position.
- n Do not change the engine governor setting or over-speed the engine. Never change or tamper with adjusters that are closed with a seal for the engine speed control.
- o Before you leave the operator compartment, for any reason:
 - Disengage all the drives and lower attachments to the ground.
 - Engage the parking brake.
 - Stop the engine and remove the key.
- p When you hit an object or mower starts to cause the vibration that is not normal, inspect the mower for damage and make repairs.

- q Decrease the throttle setting before you stop the engine.
- r Do not use this equipment for uses that the mower was not made for.

SAFE HANDLING OF FUELS

- a The fuel and the fuel vapors are flammable. Use caution when you add the fuel to the mower. The fuel vapors can cause an explosion.
- b Never use the containers that are not approved to keep or transfer fuel.
- c Never keep the mower or fuel containers near an open flame or any device that can cause the ignition of fuel or fuel vapors.
- d Never fill the fuel containers inside a vehicle or on a truck or trailer with a plastic liner. Always put the fuel container on the ground away from your vehicle before you fill the container.
- e Refuel the mower before you start the engine. When the engine is in operation or while the engine is hot, never remove the fuel cap or add fuel to the mower.
- f Refuel outdoors only and do not smoke when you add fuel. Extinguish all types of ignition.
- g The fuel nozzle must touch the rim of the fuel tank when you add fuel to the mower. Do not use a device to lock the fuel nozzle in the open position.
- h Do not over fill the fuel tank. Leave at least 1 inch (2.5 cm) below the filler neck.
- i Always tighten the fuel tank cap and container cap after you add fuel.
- j If the fuel spills on your clothing, change your clothing immediately.

MAINTENANCE AND STORAGE

- a Before you clean, adjust or repair this equipment, stop the engine and disconnect the spark plug wire. Keep the wire away from the plug to prevent the engine to start.
- b Make sure the mower is parked on a solid and level surface.
- c Never work on a mower that is lifted only by the jack. Always use the jack stands.
- d Never allow persons to service the mower or its attachments without correct instructions.
- e When the mower is parked, put into storage or left without an operator, lower the cutting device unless a positive mechanical lock is used.

1 SAFETY

- f When you put the mower on a trailer or put the mower in storage, close the fuel valve. Do not keep fuel near flames or drain the fuel inside a building.
- g Disconnect the battery before you service the mower. Always disconnect the negative battery cable before the positive battery cable. Always connect the positive battery cable before the negative battery cable.
- h Charge the battery in an area with good airflow. The battery can release hydrogen gas that is explosive. To prevent an explosion, keep any device that can cause sparks or flames away from the battery.
- i Disconnect the battery charger from the power supply before you connect or disconnect the battery charger to the battery. Wear protective clothing and use insulated tools when you service the battery.
- j Be careful and wear gloves when you check or service the cutting unit blades. Replace any damaged blades, do not try to correct a damaged blade.
- k Keep your hands and feet away from parts that move. Do not adjust the mower with the engine in operation, unless the adjustment needs the engine in operation.
- l Carefully release the pressure from components with stored energy.
- m Keep the mower and the engine clean.
- n Allow the engine to become cool before storage and always remove the ignition key.
- o Keep all nuts, bolts and screws tight to make sure the equipment is in safe condition.
- p Replace worn or damaged parts for safety. Replace damaged or worn decals. Only use parts, accessories and attachments approved by Jacobsen.
- q To decrease the fire hazard, remove materials that burn from the engine, muffler, battery tray and fuel tank area.
- r Disconnect the battery and controller connectors before you weld on this mower.

WHEN YOU PUT THE MOWER ON A TRAILER

- a Be careful when you load or unload the mower on a trailer. Trailer must be wider than the mower and can carry the weight of the mower.
- b Use a full-width ramp to load or unload the mower on a trailer.
- c Use straps, chains, cables or ropes to fasten the mower to the trailer. Both front and rear straps must be sent down and toward sides of trailer.
- d Make sure that all latches are correctly fastened.

1.2 IMPORTANT SAFETY NOTES



This safety alert symbol is used to alert you to potential hazards.

DANGER - Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

WARNING - Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

CAUTION - Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury and property damage. It may also be used to alert against unsafe practices.

NOTICE - Indicates a potentially hazardous situation which, if not avoided, **MAY** result in property damage. It may also be used to alert against unsafe practices.

For pictorial clarity, some illustrations in this manual may show shields, guards or plates open or removed. Under no circumstances should this equipment be operated without these devices securely fastened in place.



WARNING

The Operator Presence Control (OPC) on this machine will shut off the reel and traction drive if the operator releases the OPC bail.

To protect the operator and others from injury, never operate equipment with the OPC system disconnected or malfunctioning.



WARNING

1. Before leaving the operator's position for any reason:
 - a. Disengage all drives.
 - b. Engage parking brake.
 - c. Stop engine.
2. Keep hands, feet, and clothing away from moving parts. Wait for all movement to stop before you clean, adjust or service the machine.
3. Keep the area of operation clear of all bystanders and pets.
4. Chock or block the wheels if the machine is left on an incline.
5. Never operate mowing equipment without the discharge deflector securely fastened in place.

By following all instructions in this manual, you will prolong the life of your machine, and maintain its maximum efficiency. Adjustments and maintenance should always be performed by a qualified technician.

If additional information or service is needed, contact your Authorized Jacobsen who is kept informed of the latest methods to service this equipment and can provide prompt and efficient service.

2 SPECIFICATIONS

2.1 PRODUCT IDENTIFICATION

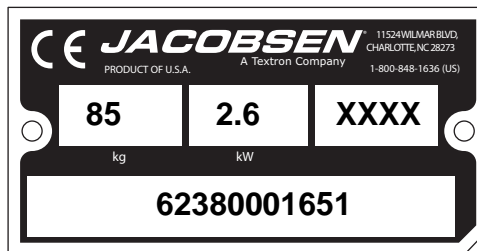
63280.....22 in., (55.9 cm) 11 Blade Professional Greens Mower with InCommand™ control system, 4.0 H.P. gasoline engine (Honda), Operator Presence Control, grass catcher, brakes, and kickstand.

63286.....22 in., (55.9 cm) 15 Blade Professional Greens Mower with InCommand™ control system, 4.0 H.P. gasoline engine (Honda), Operator Presence Control, grass catcher, brakes, and kickstand.

Serial Number An identification plate, like the one shown, listing the serial number, is

attached to the right side frame.

Always provide the serial number of the unit when ordering replacement parts or requesting service information.



2.2 ENGINE

Engine Honda GX-120K1QJG24-Cycle, 4 HP (2.98 kW) at 4000 RPM

Speed High Idle - 3300 ± 100 RPM
Low Idle - 1700 ± 100 RPM

Fuel..... Regular Grade (Unleaded)

Fuel Tank..... 0.66 Gallon (2.5 liter)

Use clean, fresh, regular unleaded gasoline, 85 octane minimum. When using blended fuel, do not use a blend with more than 10% ethanol.

Under no circumstances should you use a blend with methanol.

Engine Oil Capacity: 5/8 qt. (0.6 l)

Type: SAE 10W-30, API Classification SF or SG

2.3 MOWER

Height of cut 5/64 to 7/16 in., (0.2 to 1.1 cm)

Bedknives Hardened carbon steel

High profile yields 5/32 in., (0.4 cm) cut.

Low profile yields 7/64 in., (0.28 cm) cut.

Tournament..... yields 5/64 in., (0.2 cm) cut.

Super Tournament Yields 1/16 in. (0.16 cm) cut

Cutting Frequency 13/64 in., (0.5 cm)

Reel..... 11 or 15 blades, 5 in., (12.7 cm) diameter hardened high manganese, carbon steel

Reel Clutch..... Separate Cog-type

Reel Reduction Ratio 2.25:1

Width of cut 22 in., (55.9 cm)

2.4 TRACTION AND DIFFERENTIAL

Drive Clutch Centifugal, Engages at 2000 RPM

Traction Reduction Ratio 24:1

Traction and Reel Drive Chain drive

Transport Wheels (2) bidirectional, pneumatic
11 x 4 Goodyear Softrac

Tire Pressure 6 to 8 psi (0.41 to 0.55 BAR)

Differential Full automotive type, housed in traction drum

Rear Drive Drum Machined aluminum alloy
2 sections: 7-3/4 in., (O.D.) x 10.97 in., (19.7 x 27.8 cm)

Travel Speed 2.9 mph (4.7 km/h) @ 3000 rpm

2.5 WEIGHT

Weight (Mass)		15 Blade PGM 22	194 lb., (88 kg) with catcher,
11 Blade PGM 22	187 lb., (85 kg) with catcher,		grooved steel roller,
	roller, kickstand.		kickstand.

2.6 ACCESSORIES

Contact your area Jacobsen Dealer for a complete listing of accessories and attachments.



Use of other than Jacobsen authorized parts and accessories may cause personal injury or damage to the equipment.

Accessories

PGM MagKnife Conversion Kit	4131020
Pneumatic Transport Tires	62293
Front Gear Drive	68557
Front Roller Brush	68536
Grass Catcher	68121
Guide Wheels	68612
Height of Cut Gauge	158568
Lapping Compound (120 grit) ...	5002489 - 10 Pound Pail
	5002491 - 25 Pound Pail
Light Kit	5002962
Orange Paint (12 oz. spray)	554598
Push Brush	68500
Smooth Roller with Scraper	68530
Soft Touch Rotary Brush (Requires 68557)	68560
Solid tube Roller with Scraper	68641
Turf Groomer	68579
Vertical Reel	68556
2-1/2 Gallon Fuel Can	554948
5-1/4 Gallon Fuel Can	554949
Mower Caddy PGM Latch Kit	68652
Mower Caddy	68648

Solid Roller

Solid tube Roller with Scraper	68641
--------------------------------------	-------

Grooved Roller

Grooved Assembled Disc Roller	68527
Grooved Machined Aluminum Roller	68614
Grooved Machined Steel Roller	68613

Support Literature

Technical Manual	4131595
Operation Training Video	4191633
Service Manual	4171663

2 SPECIFICATIONS

2.7 DECLARATION OF CONFORMITY

DECLARATION OF CONFORMITY • ДЕКЛАРАЦИЯ ЗА СЪОТВЕТСТВИЕ • PROHLÁŠENÍ O SHODĚ • OVERENSSTEMMELSESERKLÆRING • CONFORMITEITSVERKLARING • VASTAVUSDEKLARATSIION • VAATIMUSTENMUKAISUUSVAKUUTUS • DECLARATION DE CONFORMITE • KONFORMITÄT SERKLÄRUNG • ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ • MEGFELELŐSÉGI NYILATKOZAT • DICHIARAZIONE DI CONFORMITÀ • ATBILSTĪBAS DEKLARĀCIJA • ATITIKTIES DEKLARACIJA • DIKJARAZZJONI TAL-KONFORMITÀ • DEKLARACJA ZGODNOŚCI • DECLARAÇÃO DE CONFORMIDADE • DECLARAȚIE DE CONFORMITATE • VYHLÁSENIE O ZHODE • IZJAVA O SKLADNOSTI • DECLARACIÓN DE CONFORMIDAD • DEKLARATION OM ÖVERENSSTÄMMELSE • SAMRÆMISYFIRLÝSING • KONFORMITETSERKLÆRING • 符合性声明 • SAMRÆMISYFIRLÝSING • 適合宣言 • 적합성 선언서 • UYGUNLUK BEYANI • ДЕКЛАРАЦИЯ ПРО ВІДПОВІДНІСТЬ

Business name and full address of the manufacturer • Търговско име и пълен адрес на производителя • Obchodní jméno a plná adresa výrobce • Producentens firmanavn og fulde adresse • Bedrijfsnaam en volledig adres van de fabrikant • Tootja ärinimi ja täielik aadress • Valmistajan toiminimi ja täydellinen osoite • Nom commercial et adresse complète du fabricant • Firmennamen und vollständige Adresse des Herstellers • Επωνυμία και ταχυδρομική διεύθυνση κατασκευαστή • A gyártó üzleti neve és teljes címe • Ragione sociale e indirizzo completo del fabbricante • Uzhēmuma nosaukums un pilna ražotāja adrese • Verslo pavadinimas ir pilnas gamintojo adresas • Isem kummerčiali u indirizz shih tal-fabbrikant • Nazwa firmy i pełny adres producenta • Nome da empresa e endereço completo do fabricante • Denumirea comercială și adresa completă a producătorului • Obchodný názov a úplná adresa výrobcu • Naziv podjetja in polni naslov proizvajalca • Nombre de la empresa y dirección completa del fabricante • Tillverkarens företagsnamn och kompletta adress • Fyrirtækisheiti og fullt heimilisfang framleiðanda • Firmanavn og full adresse for produsenten • 制造商的商业名称和完整地址 • Nafn fyrirtækis og fullt heimilisfang framleiðanda • 商号およびメーカーの正式住所 • 제조자의 상호명 및 주소 • Imalatçının ticari ünvanı ve açık adresi • Фірмове найменування і повна адреса виробника	Jacobsen, A Textron Company 11524 Wilmar Blvd. Charlotte, NC 28273, USA
Product Code • Код на продукта • Kód výrobku • Produktkode • Productcode • Toote kood • Tuotekoodi • Code produit • Produktcode • Кодікός προϊόντος • Termékkód • Codice prodotto • Produkta kods • Produktu kods • Kodici tal-Prodott • Código do Produto • Cod produs • Kód výrobku • Oznaka proizvoda • Código de producto • Produktkod • Vörunúmer • Produktkode • 产品代码 • Framleiðslunúmer • 製品コード • 제품 코드 • Ürün Kodu • Код výroby	63280 63286
Machine Name • Наименование на машината • Název stroje • Maskinnavn • Machinenaam • Masina nimi • Laitteen nimi • Nom de la machine • Maschinenbezeichnung • Ονομασία μηχανήματος • Gépnév • Denominazione della macchina • Iekārtas nosaukums • Mašinos pavadinimas • Isem tal-Magna • Nazwa urządzania • Nome da Máquina • Numele echipamentului • Názov stroja • Naziv stroja • Nombre de la máquina • Maskinens namn • Heiti tækis • Maskinnavn • 機器名称 • Nafn vélar • 機名 • 기기 명칭 • Makine Adı • Назва машини	PGM 22, 11 Blade PGM 22, 15 Blade
Designation • Предназначение • Označení • Betegnelse • Benaming • Nimetus • Tuypimerkintä • Pažymėjimas • Bezeichnung • Χαρακτηρισμός • Megnevezés • Funzione • Arzimejums • Lithuanian • Denominazzjoni • Oznaczenie • Designação • Specificație • Oznaczenie • Namen stroja • Description • Beteckning • Merking • Konstruksjon • 名称 • Útnefning • 用途 • 지정 • Tanımı • Позначення	Lawnmower, Article 12, Item 32
Serial Number • Серийн номер • Sériové číslo • Seriennummer • Seriennummer • Seerianumber • Valmistusnumero • Numéro de série • Seriennummer • Σειριακός αριθμός • Sorozatszám • Numero di serie • Sérijas numurs • Serijos numeris • Numur Serjali • Numer seryjny • Número de Série • Număr de serie • Sériové číslo • Serijska številka • Número de serie • Seriennummer • Raðnúmer • Seriennummer • 序列号 • Raðnúmer • シリアル番号 • 일련 번호 • Seri Numarası • Серийний номер	6328003000-6328004500 6328601601-6328602500
Engine • Двигател • Motor • Motor • Motor • Mootor • Moottori • Moteur • Motor • Μηχανή • Modulnév • Motore • Dzinējs • Variklis • Saħħa Netta Installata • Silnik • Motor • Motor • Motor • Motor • Motor • Vélar • Motor • 发动机 • Afivél • エンジン • 엔진 • Motor • Двигун	Honda GX-120 Gas
Net Installed Power • Нетна инсталирана мощност • Čistý instalovaný výkon • Installeret nettoeffekt • Netto geïnstalleerd vermogen • Installeeritud netovõimsus • Asennettu nettoteho • Puissance nominale nette • Installierte Nettoleistung • Καθαρή εγκατεστημένη ισχύς • Nettó beépített teljesítmény • Potenza netta installata • Paredzētā tīkla jauda • Grynoji galia • Wisa' tal-Qtugh • Moc zainstalowana netto • Potência instalada • Puterea instalată netă • Cistý inštalovaný výkon • Neto vgrajena moč • Potencia instalada neta • Nettoeffekt • Nettóafi vélar • Netto installert kraft • 装机净功率 • Netuppsättningarkorka • 搭載する正味出力 • 정미 출력 • Net Kurulu Güç • Корисна встановлена потужність	2,98 kW @ 3300 RPM
Cutting Width • Широчина на рязане • Šírka řezu • Skærebredde • Maai breedte • Löikelaius • Leikkuuleveys • Largeur de coupe • Schnittbreite • Μηκος μιστέρας • Vágási szélesség • Larghezza di taglio • Griėšanas platumas • Pjovimo plotis • Tikkonforma mad-Direttivi • Szerokość cięcia • Largura de Corte • Lățimea de tăiere • Šírka záberu • Širina reza • Anchura de corte • Klippbredd • Skurðbreidd • Klippebredde • 剪草宽度 • Breidd sláttar •刈り取り幅 • 절단 폭 • Kesme Geniřliđi • Ширина рязання	55,9 cm
Conforms to Directives • В съответствие с директивите • Splňuje podminky směrníc • Er i overensstemmelse med direktiver • Voldoet aan de richtlijnen • Vastab direktiividele • Direktiivien mukainen • Conforme aux directives • Entspricht Richtlinien • Ακολουθείστε πιστά τις Οδηγίες • Megfelel az irányelveknek • Conforme alle Direttive • Atbilst direktívām • Atitinka direktivų reikalavimus • Valutazzjoni tal-Konformità • Dyrektyvyų žvaizdė • Cumple as Directivas • Respectă Directivele • Je v súlade so smernicami • Skladnost z direktivami • Cumple con las Directivas • Uppfyller direktiv • Samræmist tilskipunum • I samsvar med direktiv • 符合指令 • Í samræmi við reglugerðir • 適合指令 • 규정 준수 • Şu Yönergelere Uyaktadır • Відповідає директиві	2004/108/EC 2006/42/EC 2000/14/EC, 2005/88/EC 2006/66/EC
Conformity Assessment • Оценка за съответствие • Hodnocení plnění podmínek • Overensstemmelsesvurdering • Conformiteitsbeoordeling • Vastavushindamine • Vaatimustenmukaisuuden arviointi • Evaluation de conformité • Konformitätsbeurteilung • Διαπίστωση Συμμόρφωσης • Megfelelőség-értékelés • Valutazione della conformità • Atbilstības novērtējums • Atitikties įvertinimas • Livell tal-Qawwa tal-Foss Imkejjel • Ocena zgodności • Avaliação de Conformidade • Evaluarea conformității • Vyhodnotenie zhodnosti • Ocena skladnosti • Evaluación de conformidad • Bedömning av överensstämmelse • Samræmistat • Konformitetsvurdering • 符合性评估 • Samræmistat • 適合性評価 • 적합성 평가 • Uygunluk Değerlendirilmesi • Оцінка відповідності	2006/42/EC Annex VIII
Measured Sound Power Level • Измерено ниво на звукова мощност • Naměřený akustický výkon • Målte lydstyrkeniveau • Gemeten geluidsniveau • Mõõdetud helivõimsuse tase • Mitattu äänitehotaso • Niveau de puissance sonore mesuré • Gemessener Schalldruckpegel • Σταθμισμένο επίπεδο ηχητικής ισχύος • Mért hangteljesítményszint • Livello di potenza sonora misurato • Izmērtais skaņas jaudas līmenis • Išmatuotas garso stiprumo lygis • Livell tal-Qawwa tal-Foss Iggarantit • Moc akustyczna mierzona • Nivel sonoro medido • Nivelul măsurat al puterii acustice • Nameraná hladina akustického výkonu • Izmerjena raven zvočne moči • Nivel de potencia sonora medido • Uppmätt ljudeffektnivå • Mælt hjóðafsstig • Målt lydeffektnivå • 测得声功率级 • Mældur hjóðstyrkur • 音出力レベル測定値 • 측정된 음향 파워 레벨 • Ölçülen Ses Gücü Düzeyi • Вимірний рівень звукової потужності	95 dB(A) ± 1.70 LWA
Guaranteed Sound Power Level • Гарантирано ниво на звукова мощност • Garantovaný akustický výkon • Garanteret lydstyrkeniveau • Gegarandeerd geluidsniveau • Garantierter helivõimsuse tase • Garantierter helivõimsuse tase • Taattu äänitehotaso • Niveau de puissance sonore garanti • Garantierter Schalldruckpegel • Εγγυημένο επίπεδο ηχητικής ισχύος • Szavatolt hangteljesítményszint • Livello di potenza sonora garantito • Garantėtais skaņas jaudas līmenis • Garantuotas garso stiprumo lygis • Livell tal-Qawwa tal-Foss Iggarantit • Moc akustyczna gwarantowana • Nivel sonoro garantido • Nivelul garantat al puterii acustice • Garantovaná hladina akustického výkonu • Zajamčena raven zvočne moči • Nivel de potencia sonora garantizado • Garanterad ljudeffektnivå • Hjóðafsstig sem ábyrgð er tekin á • Garanter lydeffektnivå • 保证声功率级 • Trygður hjóðstyrkur • 音出力保証レベル • 보장된 음향 파워 레벨 • Garantili Ses Gücü Düzeyi • Гарантований рівень звукової потужності	97 dB(A) LWA

<p>Conformity Assessment Procedure (Noise) • Оценка за съответствие на процедурата (Шум) • Postup hodnocení plnění podmínek (hluk) • Procedure for overensstemmelsesvurdering (Støj) • Procedure van de conformiteitsbeoordeling (geluid) • Vastavushindamismenetlus (müra) • Vaatimustenmukaisuuden arviointimenetely (Melu) • Procédure d'évaluation de conformité (bruit) • Konformitätsbeurteilungsverfahren (Geräusch) • Διαδικασία Αξιολόγησης Συμμόρφωσης (Θόρυβος) • Megfelelőség-értékelési eljárás (Zaj) • Procedura di valutazione della conformità (rumore) • Atbilstības novērtējuma procedūra (troksnis) • Atitikties įvertinimo procedūra (garsas) • Procedura tal-Valutazzjoni tal-Konformità (Hoss) • Procedura oceny zgodności (poziom hałas) • Processo de avaliação de conformidade (nível sonoro) • Procedura de evaluare a conformității (zgomot) • Postup vyhodnocovania zhodnosti (hluk) • Postopek za ugotavljanje skladnosti (hrup) • Procedimiento de evaluación de conformidad (ruido) • Procedur för bedömning av överensstämmelse (buller) • Samræmis matsaðferð (hávaði) • Prosedyre for konformitetsvurdering (støy) • 符合性评估程序 (噪声) • Aðgerð fyrir samræmis mat (Hávaði) • 適合性評価の手順 (騒音) • 적합성 평가 절차 (소음) • Uygunluk Değerlendirme Prosedürü (Gürültü) • Регламент оцінки відповідності (шум)</p>	<p>2000/14/EC Annex VI, Part 1</p>
<p>UK Notified Body for 2000/14/EC • Нотифициран орган в Обединеното кралство за 2000/14/EO • Úřad certifikovaný podle směrnice č. 2000/14/EC • Det britiske bemyndigede organ for 2000/14/EF • Engels adviesorgaan voor 2000/14/EG • Ühendkuningriigi teavitatud asutus direktiivi 2000/14/EÜ mõistes • Direktiivin 2000/14/EY mukainen ilmoitettu tarkastuslaitos Isonsa-Britanniassa • Organisme notifié concernant la directive 2000/14/CE • Britische benannte Stelle für 2000/14/EG • Κοινοποιημένος Οργανισμός Ηνωμένου Βασιλείου για 2000/14/EK • 2000/14/EK – egyesült királyságbeli bejelentett szervzet • Organismo Notificato in GB per 2000/14/CE • 2000/14/EK AK registrētā organizācija • JK notifikuotosios įstaigos 2000/14/EC • Korp Notifikat tar-Renju Unit ghal 2000/14/KE • Dopuszczona jednostka badawcza w Wielkiej Brytanii wg 2000/14/WE • Entidade notificada no Reino Unido para 2000/14/CE • Organism notificat în Marea Britanie pentru 2000/14/CE • Notifikovaný orgán Spojeného královstva pre smernicu 2000/14/ES • Britanski priglašeni organ za 2000/14/ES • Cuerpo notificado en el Reino Unido para 2000/14/CE • Anmält organ för 2000/14/EG i Storbritannien • Tilkyntur aðili í Bretlandi fyrir 2000/14/EC • Britisk teknisk for 2000/14/EF • 英国 2000/14/EC 认证机构 • Bretland Upplýsingar fyrir 2000/14/EB • UK (英国) 公認機関、2000/14/EC • 2000/14/EC 에 대한 영국 인증 기관 • 2000/14/EC için BK Onaylı Kuruluş • Британський уповноважений орган для 2000/14/EC</p>	<p style="text-align: center;">Number: 1088</p> <p>Sound Research Laboratories Limited Holbrook House, Little Waldingfield Sudbury, Suffolk CO10 0TH</p>
<p>Operator Ear Noise Level • Оператор на нивото на доловим от ухото шум • Hladina hluku v oblasti uší operátora • Støjniveau i førers ørehøjde • Geluidsniveau oor bestuurder • Műratase operaatori kõrvas • Melutaso käyttäjän korvan kohdalla • Niveau de bruit à hauteur des oreilles de l'opérateur • Schallpegel am Bedienerohr • Επίπεδο θορύβου σε λειτουργία • A kezelő fülénél mért zajszint • Livello di potenza sonora all'orecchio dell'operatore • Tröskna ímennis pie operatora auss • Dirbančiojo su mašina patiriama triukšmo lygis • Livell tal-Hoss fil-Widna tal-Operatur • Dopuszczalny poziom hałas dla operatora • Nivel sonoro nos ouvidos do operador • Nivelul zgomotului la urechea operatorului • Hladina hluku pôsobiaci na sluch operátora • Raven hrupa pri užesu upravljavca • Nivel sonoro en el oído del operador • Ljudnivå vid förens öra • Hávaðastig fyrir stjórnanda • Stöjnivá ved operatøren øre • 操作员耳旁噪声级 • Hljóðstyrkur fyrir stjórnanda • オペレータが感じる騒音レベル • 사용자 청각 소음 레벨 • Operatör Kulak Gürültü Düzeyi • Рівень шуму, що впливає на оператора</p>	<p>83 dB(a) Leq ± 1.70 (2006/42/EC) 82 dB(a) Leq ± 1.70 (2006/42/EC)</p>
<p>Harmonised standards used • Използвани хармонизирани стандарти • Použité harmonizované normy • Brugte harmoniserede standarder • Gebruikte geharmoniseerde standaards • Kasutatud ühtlustatud standardid • Käytetyt yhdenmukaistetut standardit • Normes harmonisées utilisées • Angewandte harmonisierte Normen • Ενωμοποιημένα πρότυπα που χρησιμοποιήθηκαν • Harmonizált szabványok • Standard armonizzati applicati • Izmantotie saskaņotie standarti • Panaudoti suderinti standartai • Standards armonizzati uzati • Normy spójne powiązane • Normas harmonizadas usadas • Standardele armonizate utilizate • Použité harmonizované normy • Uporabljeni usklajeni standardi • Estándares armonizados utilizados • Harmoniserade standarder som används • 所采用的协调标准 • Samstillir staðlar notaðir • 整合規格 • 적용되는 조화 표준 • Kullanilan uyumlu standartlar • Використані гармонізовані стандарти</p>	<p>BS EN ISO 20643 BS EN ISO 5349-1 BS EN ISO 5349-2 BS EN ISO 5395-3</p>
<p>Technical standards and specifications used • Използвани технически стандарти и спецификации • Použité technické normy a specifikace • Brugte tekniske standarder og specifikationer • Gebruikte technische standaards en specificaties • Kasutatud tehnilised standardid ja spetsifikatsioonid • Käytetyt tekniset standardit ja eritelmät • Spécifications et normes techniques utilisées • Angewandte technische Normen und Spezifikationen • Τεχνικά πρότυπα και προδιαγραφές που χρησιμοποιήθηκαν • Műszaki szabványok és specifikációk • Standard tecnici e specifiche applicati • Izmantotie tehniekie standarti un specifikkācijas • Panaudoti techniniai standartai ir techninė informacija • Standards u specifikkazzjonijiet teknici uzati • Normy i specyfikacje techniczne powiązane • Normas técnicas e especificações usadas • Standardele tehnice și specificațiile utilizate • Použité technické normy a špecifikácie • Uporabljeni tehnični standardi in specifikacije • Estándares y especificaciones técnicas utilizadas • Tekniska standarder och specifikationer som används • Samræmdir staðlar sem notaðir eru • Benyttede tekniske standarder og specifikationer • 所采用的技术标准规范 • Tæknistaðlar og -kröfur notaðar • 技術規格および仕様書 • 적용되는 기술 표준 및 규격 • Kullanilan teknik standartlar ve şartnameler • Використані технічні стандарти і умови</p>	<p>B71.4 ISO 2631-1</p>
<p>The place and date of the declaration • Място и дата на декларацията • Místo a datum prohlášení • Sted og dato for erklæringen • Plaats en datum van de verklaring • Deklaratsiooni väljastamise koht ja kuupäev • Vakuutuksen paikka ja päivämäärä • Lieu et date de la déclaration • Ort und Datum der Erklärung • Τόπος και ημερομηνία δήλωσης • A nyilatkozat kelte (hely és idő) • Luogo e data della dichiarazione • Deklarācijas vieta un datums • Deklarācijas vieta ir data • Il-post u d-data tad-dikjarazzjoni • Miejsce i data wystawienia deklaracji • Local e data da declaração • Locul și data declarației • Miesto a dátum vyhlášení • Kraj in datum izjave • Lugar y fecha de la declaración • Plats och datum för deklarationen • Tæknistaðlar og tæknilysingar sem notaðar eru • Benyttede tekniske standarder og specifikationer • Staður og dagsetning yfirlýsingar • Sted og dato for erklæringen • 声明的地点与日期 • Staður og dagsetning yfirlýsingarinnar • 宣言場所および日付 • 선언 장소 및 일자 • Bayan yeri ve tarihi • Місце і дата укладення декларації</p>	<p>Jacobsen, A Textron Company 11524 Wilmar Blvd. Charlotte, NC 28273, USA September 2nd, 2014</p>

2 SPECIFICATIONS

<p>Signature of the person empowered to draw up the declaration on behalf of the manufacturer, holds the technical documentation and is authorised to compile the technical file, and who is established in the Community.</p> <p>Подпис на човека, упълномощен да състави декларацията от името на производителя, който поддържащ техническата документация и е авторизиран да изготви техническия файл и е регистриран в общността.</p> <p>Podpis osoby oprávněné sestavit prohlášení jménem výrobce, držet technickou dokumentaci a osoby oprávněné sestavit technické soubory a založené v rámci Evropského společenství.</p> <p>Underskrift af personen, der har fuldmagt til at udarbejde erklæringen på vegne af producenten, der er indehaver af dokumentationen og er bemyndiget til at udarbejde den tekniske journal, og som er baseret i nærområdet.</p> <p>Handtekening van de persoon die bevoegd is de verklaring namens de fabrikant te tekenen, de technische documentatie bewaart en bevoegd is om het technische bestand samen te stellen, en die is gevestigd in het Woongebied.</p> <p>Ühenduse registrisse kantud isiku allkiri, kes on volitatud tootja nimel deklaratsiooni koostama, kes omab tehnilist dokumentatsiooni ja kellel on õigus koostada tehniline toimik.</p> <p>Sen henkilöön allekirjoitus, jolla on valmistajan valtuutus vakuutuksen laadintaan, jolla on hallussaan tekniset asiakirjat, joka on valtuutettu laatimaan tekniset asiakirjat ja joka on sijoittautunut yhteisöön.</p> <p>Signature de la personne habilitée à rédiger la déclaration au nom du fabricant, à détenir la documentation technique, à compiler les fichiers techniques et qui est implantée dans la Communauté.</p> <p>Unterschrift der Person, die berechtigt ist, die Erklärung im Namen des Herstellers abzugeben, die die technischen Unterlagen aufbewahrt und berechtigt ist, die technischen Unterlagen zusammenzustellen, und die in der Gemeinschaft niedergelassen ist.</p> <p>Υπογραφή ατόμου εξουσιοδοτημένου για την σύνταξη της δήλωσης εκ μέρους του κατασκευαστή, ο οποίος κατέχει την τεχνική έκθεση και έχει την εξουσιοδότηση να ταξινομήσει τον τεχνικό φάκελο και ο οποίος είναι διορισμένος στην Κοινότητα.</p> <p>A gyártó nevében meghatalmazott személy, akinek jogában áll módosítania a nyilatkozatot, a műszaki dokumentációt őrizi, engedéllyel rendelkezik a műszaki fájl összeállításához, és aki a közösségben letelepedett személy.</p> <p>Firma della persona autorizzata a redigere la dichiarazione a nome del fabbricante, in possesso Della documentazione tecnica ed autorizzata a costituire il fascicolo tecnico, che deve essere stabilita nella Comunità.</p> <p>Tās personas paraksts, kura ir pilnvarota deklarācijas sastādīšanai ražotāja vārdā, kurai ir tehniskā dokumentācija, kura ir pilnvarota sagatavot tehnisko reģistru un kura ir apstiprināta Kopienā.</p> <p>Asmuo, kuris yra gana žinomas, kuriam gamintojas suteikė įgaliojimus sudaryti šią deklaraciją, ir kuris ją pasirašė, turi visą techninę informaciją ir yra įgaliojotas sudaryti techninės informacijos dokumentą.</p> <p>Il-firma tal-persuna awtorizzata li tfassal id-dikjarazzjoni f'isem il-fabbrikant, għandha d-dokumentazzjoni teknika u hija awtorizzata li tikkompila l-fajl tekniku u li hija stabbilita fil-Komunità.</p> <p>Podpis osoby upoważnionej do sporządzenia deklaracji w imieniu producenta, przechowującej dokumentację techniczną, upoważnioną do stworzenia dokumentacji technicznej oraz wyznaczonej ds. wspólnotowych.</p> <p>Assinatura da pessoa com poderes para emitir a declaração em nome do fabricante, que possui a documentação técnica, que está autorizada a compilar o processo técnico e que está estabelecida na Comunidade.</p> <p>Semnătura persoanei împuternicite să elaboreze declarația în numele producătorului, care deține documentația tehnică, este autorizată să compileze dosarul tehnic și este stabilită în Comunitate.</p> <p>Podpis osoby poverenej vystavením vyhlásenia v mene výrobcu, ktorá má technickú dokumentáciu a je oprávnená spracovať technické podklady a ktorá je umiestnená v Spoločenstve.</p> <p>Podpis osebe, pooblaščene za izdelavo izjave v imenu proizvajalca, ki ima tehnično dokumentacijo in lahko sestavlja spis tehnične dokumentacije, ter ima sedež v Skupnosti.</p> <p>Firma de la persona responsable de la declaración en nombre del fabricante, que posee la documentación técnica y está autorizada para recopilar el archivo técnico y que está establecido en la Comunidad.</p> <p>Undertecknas av den som bemyndigad att upprätta deklarationen å tillverkarens vägnar, innehar den tekniska dokumentationen och är bemyndigad att sammanställa den tekniska informationen och som är etablerad i gemenskapen.</p> <p>Undirskrift aðilans sem hefur umboð til að gera yfirlýsinguna fyrir hönd framleiðandans, hefur undir höndum tæknigögnin og hefur leyfi til að taka saman tækniskýrsluna, og er viðurkenndur innan evrópska efnahagssvæðisins.</p> <p>Signaturen til personen som har fullmakt til at utferdige erklæringen på vegne av produsenten, er i besittelse av den tekniske dokumentasjonen, har autorisasjon til å utarbeide den tekniske filen og som har tilhold i EU.</p> <p>获得授权代表制造商起草声明者的签名，此人保留技术文档并获授权编译技术文件，且是社区中获得认可者。</p> <p>Undirskrift starfsmanns sem hefur heimild til að rita yfirlýsinguna fyrir hendi framleiðandans, hefur umsjón með tæknigögnum og hefur heimild til að setja saman tæknilega skýrslu og sem er tengdur inn í samfélagið.</p> <p>メーカーを代表して宣言書を起草し、技術文書を保有し技術ファイルを編集する権限を有し、地域において確固たる地位を築いている人物の署名。</p> <p>제조자를 대신하여 선언서를 작성하도록 위임받은 서명자는 기술 문서를 보유하고 기술 자료 수집의 허가를 받았으며 지역 공동체 내에 속해 있습니다</p> <p>İmalatçı adına beyan hazırlama yetkisi olan, teknik dokümantasyonu elinde bulunduran ve teknik dosyayı derleme yetkisine sahip, Topluluk içinde yerleşik kişinin imzası.</p> <p>Підпис особи, що уповноважена укласти декларацію від імені виробника, має технічну документацію, уповноважена укласти технічний паспорт і має добру репутацію в суспільстві.</p>	<p>2006/42/EC Annex II 1.A.2</p> <p>Christian D. Clifford Senior Engineering Manager Ransomes Jacobsen Limited West Road, Ransomes Europark, Ipswich, IP3 9TT, England</p> <p>2006/42/EC Annex II 1.A.10 Derek Mookhoek Director of Engineering Jacobsen, A Textron Company 11524 Wilmar Blvd, Charlotte, NC 28273, USA</p>
<p>Certificate Number • Номер на сертификат • Číslo osvědčení • Certifikatnummer • Certificaatnummer • Sertifikaadi number • Hyväksyntänumero • Numéro de certificat • Bescheinigungsnummer • Αριθμός Πιστοποιητικού • Hitelesítési szám • Numero del certificato • Sertifikata numurs • Sertifikato numeris • Numru tač-Certifikat • Numer certyfikatu • Número do Certificado • Număr certificat • Číslo osvedčenia • Številka certifikata • Número de certificado • Certifikatsnummer • Númer skirteinis • Sertifikatnummer • 证书编号 • Skirteinisnúmer • 認證番号 • 인증 번호 • Sertifika Numarası • Номер сертификата</p>	<p>4131595 Rev B</p>



2.8 VIBRATION LEVEL

When the machine was tested for hand/arm vibration levels, the operator was standing in the normal operating position with both hands on the handle. The engine was running and the cutting device was rotating with the machine stationary.

The Machinery Safety Directive 2006/42/EC

By compliance to:

The Lawnmower Standard EN836:1997

Referenced to Hand/Arm: BS EN ISO20643:2008

Information Supplied for Physical Agents Directive 2002/44/EC

By reference to:

Hand/Arm Standards: BS EN ISO 5349-1 (2001)

BS EN ISO 5349-2 (2001)

PGM 22 Hand/Arm Acceleration Level	63280 PGM 22, 11 Blade 63286 PGM 22, 15 Blade
	Maximum Left Hand or Right Hand Accelerations m/s^2
	Mean Value of X, Y, Z Aeq
	2.53 ± 1.3

3 DECALS

3.1 DECALS

Familiarize yourself with the decals, they are critical to the safe operation of the mower. REPLACE DAMAGED DECALS IMMEDIATELY.


⚠ CAUTION

1. Read operator's manual before operating machine.
2. Keep shields in place and hardware securely fastened.
3. Before you clean, adjust or repair this equipment, disengage all drives, engage parking brake and stop engine.
4. Keep hands, feet and clothing away from moving parts.
5. Never carry passengers.
6. Keep bystanders away.

361854

⚠ DANGER

To avoid serious bodily injury stop engine and disengage reels before working on mower or emptying baskets.



3001235

⚠ CAUTION

BE SURE THE TRACTION CLUTCH LEVER IS IN NEUTRAL BEFORE STARTING THE ENGINE.

3001790

⚠ PRECAUCION

1. No opere esta maquina sin previo entrenamiento, instruccion y sin haber leído el manual de operacion.
2. Tenga todas las guardas en su lugar y plezas bien aseguradas.
3. Neutralice todas las velocidades y apague el motor antes de vaciar los recolectores de pasto, darie servicio, limpliar, ajustar y destrabar la maquina.
4. Mantenga las manos, los ples y ropa suelta lejos de plezas en movimiento.
5. No deberan transportar pasajeros si no existe un asiento para ellos.
6. Si no sabe leer ingles, pida que aiguien le lea las calcomanias de avisos y los manuales de instruccion y operacion.

340830

⚠ CAUTION

ALLOW ENGINE TO COOL FOR 2 MINUTES BEFORE REFUELING

362764



Vehicle Mass:		⚠ WARNING
Model PGM 19	84.0 kg	Keep Bystanders Away. Do Not Operate Without Guards In Place
Model PGM 22	85.0 kg	
Model 518A	95.3 kg	
Model 522TA	100.7 kg	
Model 522A	101.2 kg	
Model 526A	123.4 kg	
Model TC22	101.1 kg	2811102

⚠ WARNING

TO PREVENT INJURY AND ACCIDENTAL CLUTCH ENGAGEMENT DO NOT ADJUST ENGINE SPEED USING THROTTLE LEVER ON ENGINE. ALWAYS ADJUST ENGINE SPEED USING THE OPC HANDLE AND THROTTLE PADDLE

4146636

4.1 GENERAL

The set-up and testing of the unit should always be performed by a trained technician, familiar with the operation of the equipment.

Read each instruction completely and make sure you understand it before proceeding with the assembly. Stay alert for potential hazards and obey all safety precautions.

The RIGHT, LEFT, FRONT, and REAR of the machine are referenced from the operator's position, facing forward.

Accessories not included with this product must be ordered separately. See instructions provided with accessory for installation and parts.

CAUTION

Do not attempt to operate the machine unless you are familiar with this type of equipment and know how to operate all controls correctly.

This machine is shipped assembled. After unpacking, perform the initial inspection, operating checks, and test the Operator Presence Control (OPC).

4.2 INITIAL INSPECTION

CAUTION

The initial inspection should be performed only when the engine is off and all fluids are cold. Disengage all drives, engage parking brake, stop engine, and disconnect spark plug wire.

1. Perform a visual inspection of the entire unit, look for signs of wear, loose hardware, and components that may have been damaged during transport.
2. Inspect paint and decals for damage or scratches. Decals provide important operating and safety information. Replace all missing or hard to read decals.
3. Check that the engine oil level is at the full level mark with the engine cold.

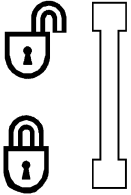
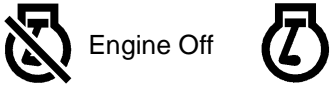






NOTICE

Mower is shipped without oil in the engine. To prevent permanent damage, oil must be added before starting engine. See Section 8.3 for oil specifications

4. Visually check for fuel or oil leaks.
5. Inspect lube points for proper lubrication.

5 CONTROLS

5.1 ICONS

<p>Operator Presence Control</p>  <p>Unlock</p> <p>Lock</p>	<p>Engine</p>  <p>Engine Off</p> <p>Engine Run</p>	<p>Throttle</p> <p>Fast</p>  <p>Slow</p> 
	<p>Parking Brake</p> <p>Engaged</p>  <p>Disengaged</p> 	 <p>Fuel Gasoline</p>  <p>Choke</p>

WARNING

Never attempt to operate the machine unless you have read the Technical Manual, the engine manual, and know how to operate all controls correctly.

Familiarize yourself with the icons shown above and what they represent. Learn the location and purpose of all the controls before operating this mower.

5.2 CONTROLS

- A. **Parking Brake** – Used whenever the mower is left unattended or as a service brake while transporting.
- B. **Paddle Throttle** – Controls the speed of the engine when OPC Bail is engaged. Push (+) side of lever to increase engine speed. Push (-) side of lever to decrease engine speed.
- C. **O.P.C. Bail** – Engaging bail increases engine speed which engages the centrifugal clutch. Release bail to return engine to idle. The bail must be disengaged to start the engine.
- D. **Engine Switch** – The engine switch enables and disables the ignition system. The engine switch must be in the ON position for the engine to run. Turning the engine switch to the OFF position stops the engine.

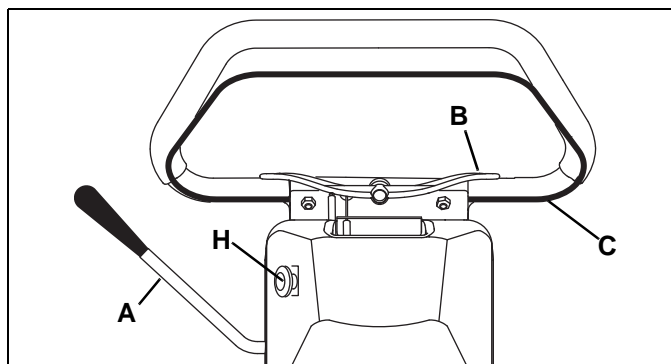


Figure 5A

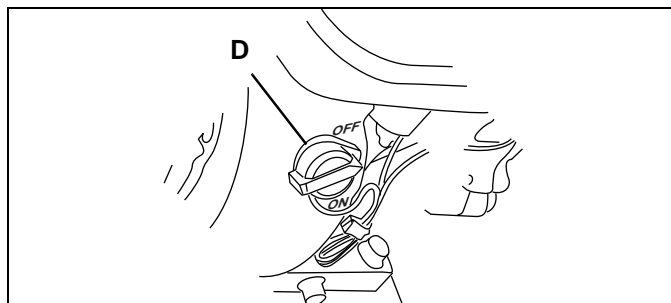


Figure 5B

- E. Reel Clutch Lever** – To disengage, turn handle (E) to point downwards. Always disengage clutch when mower is being transported.

WARNING

To prevent bodily injury or property damage, never engage the reel clutch lever while the engine is running or the O.P.C. bail is engaged.

DANGER

Keep hands and feet away from the cutting unit to prevent serious cuts.

- F. Choke Lever** - The choke lever opens and closes the choke valve in the carburetor. The CLOSED position enriches the fuel mixture for starting a cold engine. The OPEN position provides the correct fuel mixture for operation after starting, and for restarting a warm engine.

- G. Fuel Valve Lever** - The fuel valve opens and closes the connection between the fuel tank and the carburetor. The fuel valve lever must be in the ON position for the engine to run. When the engine is not in use, leave the fuel valve lever in the OFF position to prevent carburetor flooding and to reduce the possibility of fuel leakage.

NOTICE

Before tipping mower back for adjustments, the fuel lever must be moved to the OFF position to prevent fuel from leaking into the crankcase.

- H. E-Stop** - Used to stop the engine. Push switch down to disable engine ignition, pull up for normal operation.

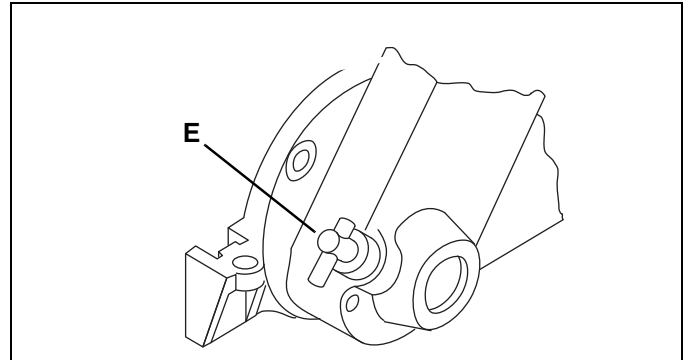


Figure 5C

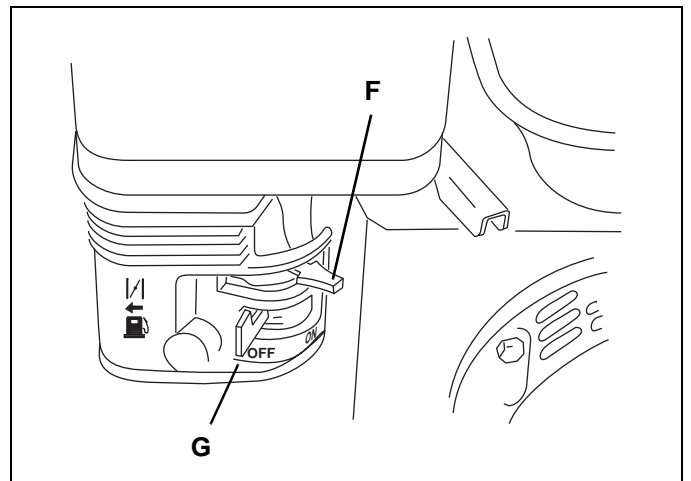


Figure 5D

6 OPERATION

6.1 DAILY INSPECTION

CAUTION

The daily inspection should be performed only when the engine is off and all fluids are cold. Disengage all drives, engage parking brake, stop engine, and disconnect spark plug wire.

1. Perform a visual inspection of the entire unit, look for signs of wear, loose hardware, missing, or damaged components. Check for fuel or oil leaks.

2. Check the fuel supply and crankcase oil level. All fluids must be at the full level mark.
3. Make sure the mower is adjusted to the required cutting height.
4. Make sure the machine is lubricated and the transport tires are properly inflated.
5. Check the O.P.C. system (Section 6.2).

6.2 OPERATOR PRESENCE CONTROL

1. The O.P.C. system is intended to protect the operator and others from injury by stopping the reel and drive mechanism as soon as the operator releases the O.P.C. bail. The unit is also equipped with an engine stop (E-Stop) switch that will stop the engine from the operator's position.

WARNING

Never operate equipment with the O.P.C. system disconnected or malfunctioning. Do not disconnect or bypass any switch.

2. To test the system:

- a. Place mower on the kickstand.

- b. Disengage the reel clutch lever **(E)**.
3. Start the engine.
 - a. Slide bail to the left and engage OPC Bail.
 - b. Engine speed will increase, the drive mechanism will engage, and the wheels will begin to turn.
 - c. Release the O.P.C. bail. The bail must disengage, engine speed return to idle, and drive mechanism must stop.
 - d. Push E-Stop switch down. Engine must stop immediately.
4. If the drive mechanism engages before the O.P.C. bail is engaged, or the drive mechanism continue to turn after the O.P.C. bail is released, stop the engine immediately and have the system repaired.

6.3 OPERATING PROCEDURES



CAUTION

To help prevent injury, always wear safety glasses, leather work shoes or boots, a hard hat, and ear protection. Long hair, loose clothing, or jewelry may get tangled in moving parts.

1. Under no circumstances should the engine be started with operator or bystanders standing in front of the reel.
2. Never run the engine in an enclosed area.
3. Keep hands and feet away from moving parts and cutting units. If possible, do not make adjustments with the engine running.
4. Do not operate mower or attachments with loose, damaged or missing components. Whenever possible mow when grass is dry.
5. First mow in a test area to become thoroughly familiar with the operation of the mower and control levers.
8. Use discretion when mowing near gravel areas (roadway, parking areas, cart paths, etc.). Stones discharged from the mower may cause serious injuries to bystanders and/or damage the equipment.
9. Disengage the reel clutch to stop blades when not mowing.
10. Disengage the reel clutch when crossing paths or roadways. Look out for traffic.
11. Stop and inspect the equipment for damage immediately after striking an obstruction or if the machine begins to vibrate abnormally. Have the equipment repaired before resuming operation.

NOTICE

To prevent damage to the reel and bedknife never operate the reels when they are not cutting grass. Excessive friction and heat will develop between the bedknife and reel, and damage the cutting edge.

6. Study the area to determine the best and safest operating procedure. Consider the height of the grass, type of terrain, and condition of the surface. Each condition will require certain adjustments or precautions. Only use accessories and attachments approved by Jacobsen.
7. Be aware of mower discharge direction and never direct discharge of material toward bystanders. Never allow anyone near the machine while in operation. The owner/operator is responsible for injuries inflicted to bystanders and/or damage to their property.



WARNING

Before you clean, adjust, or repair this equipment, always disengage all drives, engage parking brake, stop engine, and remove spark plug wire to prevent injuries.

12. Slow down and use extra care on hillsides. Use caution when operating near drop offs.
13. Look behind and down before backing up to be sure of a clear path. Use care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.
14. Never use your hands to clean cutting units. Use a brush to remove grass clippings from blades. Blades are extremely sharp and can cause serious injuries.



CAUTION

Before mowing, pick up all debris such as rocks, toys, and wire which can be thrown by the machine. Enter a new area cautiously. Always operate at speeds that allow you to have complete control of the mower.

6 OPERATION

6.4 STARTING/STOPPING ENGINE

CAUTION

Always start and stop the engine when the mower is on level ground. Keep feet away from blade when starting engine.

Starting

1. Check oil level and fuel supply, then open fuel valve lever (G).
2. Move the choke lever (F) to the CLOSED position.
3. Set engine switch (D) to ON.
4. Make certain the O.P.C. bail (C) is disengaged and the parking brake (A) is engaged.
5. Select desired position for reel clutch lever (E).

To cut - engage reel clutch (E).

To transport - disengage reel clutch (E).

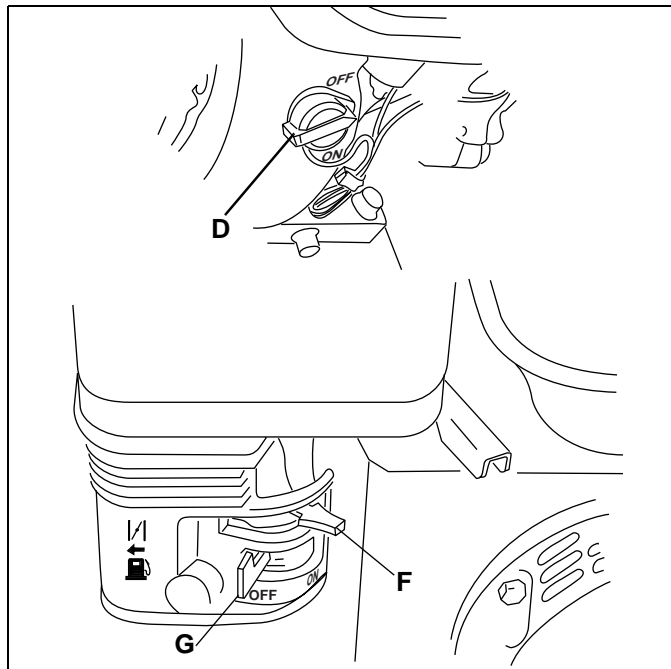


Figure 6A

WARNING

To prevent bodily injury or property damage, never engage the reel clutch lever while the engine is running or the O.P.C. bail is engaged.

6. Start the engine. Do not allow the cord to snap back into the starter. Do not tilt the mower back when starting.
7. When engine starts, move choke lever (F) to the OPEN position. Intermittent choking may be required while engine is cold.
8. Allow engine to warm up gradually.

Stopping

1. To stop the engine, release the O.P.C. bail (C), and set engine switch (D) to OFF position. Close fuel valve (G).
2. Engage parking brake (A).

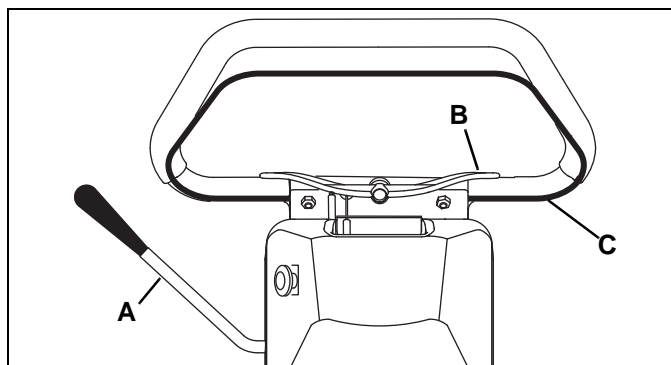


Figure 6B

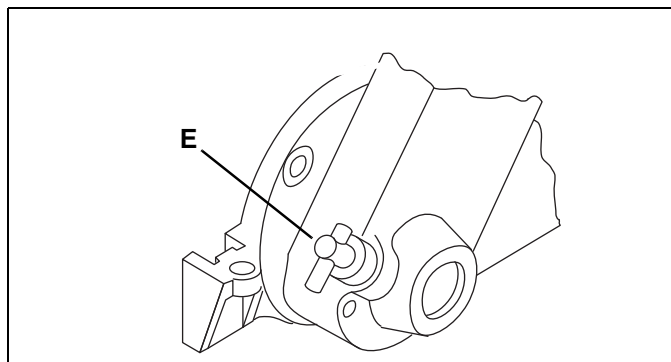


Figure 6C

6.5 TRANSPORT WHEELS (OPTIONAL KIT 62293)

WARNING

Always stop the engine and disengage the drive levers before installing or removing the transport wheels.

1. Push and hold the kickstand against the ground then pull the mower handle back until the mower rests on the stand (**L**).
2. To remove wheels, press retaining clip (**J**) away from the hub and pull wheel off hub.
3. To install wheels, set brake, press retaining clip (**J**), place wheel on hub, and turn the wheel backwards until studs on back of wheel line up with holes in hub (**K**). Push wheel in and release clip.
4. Always disengage reel clutch lever (**E**), prior to transporting the mower more than a few feet.
5. Push the mower forward off the kickstand, start the engine, and engage the O.P.C. bail (**C**).

6. When using a vehicle to transport the mower, apply parking brake, stop engine, and close fuel shut-off valve. Chock or block the wheels.
7. Keep tires inflated to 6 to 8 psi (0.41 to 0.55 BAR).

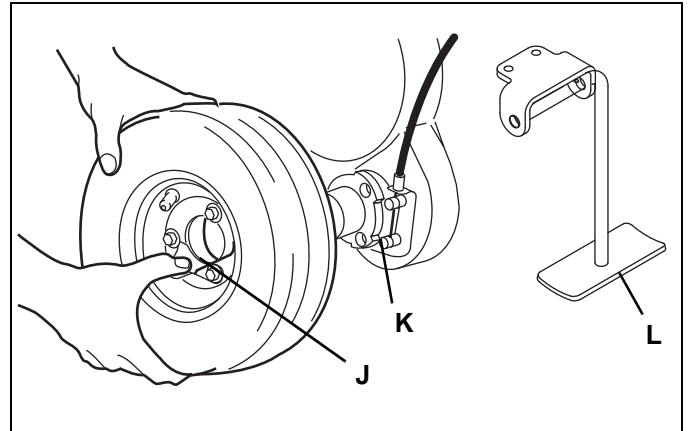


Figure 6D

6.6 GRASS CATCHER

1. When the basket is about two thirds (2/3) full of grass clippings, move mower off the green.
2. Stop on a flat surface, disengage all drives, and stop the engine.
3. Remove and empty the grass catcher. Use a long handle brush to remove grass clippings from the mower.

DANGER

To prevent serious injury, always stop the engine, and disengage all drives before emptying grass catcher.

6 OPERATION

6.7 MOWING

1. Stop engine. Place mower on kickstand and remove the transport wheels if installed. **See Section 6.5.**
2. Engage the reel lever (**E**) and push mower off the kickstand. Start the engine.



WARNING

To prevent bodily injury or property damage, never engage the reel clutch lever while the engine is running or the O.P.C. bail is engaged.

3. Position mower slightly off the green.
 - a. Adjust engine speed (**B**) to provide a safe, comfortable walking speed.
 - b. Push handle down to lift the mower head above the grass then engage the O.P.C. bail (**C**).
 - c. As the mower crosses the edge of the green, lower the mower head to the ground and proceed across the green in a straight line. While mowing support the handle so the handle tubes do not contact the handle stops. Allowing the handle to rest on the handle stops or pushing the handle up into the stops may result in an uneven cut.
 - d. When the opposite side of the green is reached, push down of the handle to lift the mower head without disengaging the O.P.C. bail and proceed off the green to turn around or simply release O.P.C. bail and turn around.
 - e. To turn to the right, start by turning mower slightly to the left (**2**). When the mower has moved approximately 1/2 its own width to the left, swing it around quickly to the right (**3 and 4**), guiding the mower with your right hand. This method makes it possible to turn around quickly with very few steps. **[Figure 6E]**

NOTICE

To prevent damage to the reel and bedknife never operate the reels when they are not cutting grass. Excessive friction and heat will develop between the bedknife and reel, and damage the cutting edge.

4. To assure complete, even cutting, overlap swaths by 1 to 2 in. (2.5 to 5.1 cm), then make one or more passes around the perimeter of the green to clean ragged edges and separate the putting green surface from the apron.

5. For a more even playing surface and neater appearance, alter the mowing pattern each time a green is mowed. The patterns shown in **Figure 6F** are suggestions only, the operator or course superintendant can arrange patterns to suit each green.
6. Use caution while operating on hillside and drop-offs.

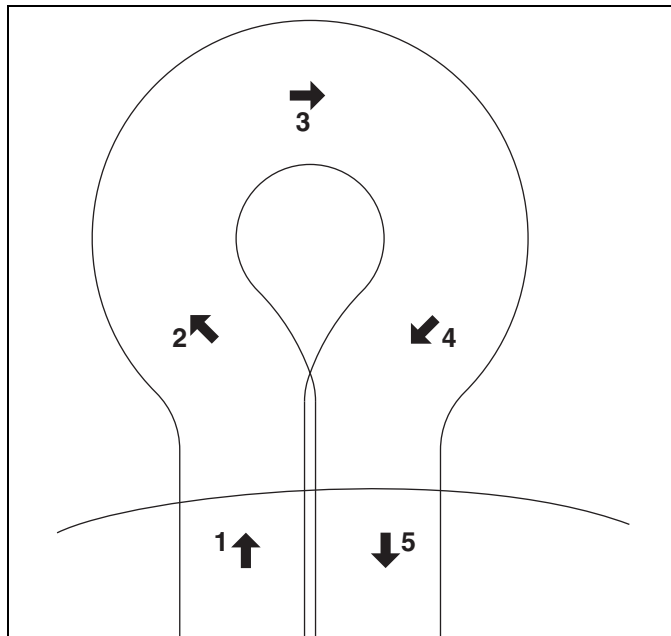


Figure 6E

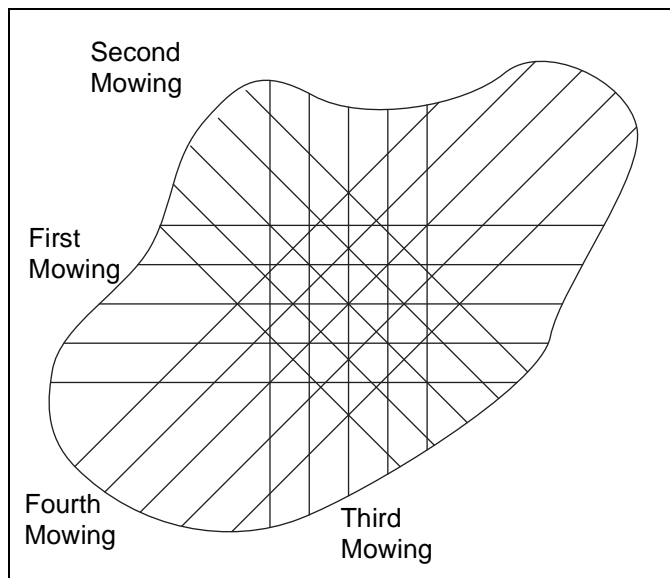


Figure 6F

6.8 DAILY MAINTENANCE

1. Park the mower on a flat, level surface, engage parking brake, and stop the engine.
2. Grease and lubricate all points if required.
3. To prevent fires, wash the mower after each use. Clean all grass clippings and debris off reel, drives, engine, and muffler
 - a. Use only fresh water for cleaning your equipment.

NOTICE

Use of salt water or affluent water will encourage rust and corrosion of metal parts resulting in premature deterioration or failure. Damage of this nature is not covered by the factory warranty.

- b. Do not use high pressure spray.
- c. Do not spray water into the cooling fins or the engine air intake.

NOTICE

Do not wash a hot or running engine. Use compressed air to clean the engine.

4. Fill fuel tank at the end of each operating day. Do not fill above the fuel strainer shoulder. Close fuel valve **(G)** when unit is not in use.

Use clean, fresh, unleaded gasoline, 86 octane minimum. Refer to the engine's operator manual for fuel recommendations when using blended fuel.

Handle fuel with care - it is highly flammable. Use an approved container, the spout must fit inside the fuel filler neck. Avoid using cans and funnels to transfer fuel.



WARNING

Never remove the fuel cap from the fuel tank, or add fuel, when the engine is running or while the engine is hot.

Do not smoke when handling fuel. Never fill or drain the fuel tank indoors.

Do not spill fuel and clean spilled fuel immediately.

Never handle or store fuel containers near an open flame or any device that may create sparks and ignite the fuel or fuel vapors.

Be sure to reinstall and tighten fuel cap securely.

5. Store fuel according to local, state, or federal ordinances, and recommendations from your fuel supplier.
6. Check the engine oil at the start and end of each day, before starting the engine. If the oil level is low, remove the oil filler cap and add oil as required. Do not overfill.

7 ADJUSTMENTS

7.1 GENERAL

WARNING

Before you adjust, clean, or repair this equipment, always disengage all drives, engage parking brake, and stop engine to prevent serious injury.

Whenever performing maintenance other than carburetor adjustments, remove the spark plug wire, and place the wire away from the plug to prevent accidental starting and bodily injury.

1. Adjustments and maintenance should always be performed by a qualified technician. If proper adjustment cannot be made, contact an authorized Jacobsen dealer.

2. Replace, do not adjust, worn or damaged components.
3. Long hair, jewelry, or loose fitting clothing may get tangled in moving parts.

CAUTION

Be careful to prevent entrapment of the hands and fingers between moving and fixed components of the machine.

4. Do not change governor settings or overspeed the engine.

7.2 REEL-TO-BEDKNIFE

(Pre-adjustment Check)

1. Check the reel bearings for end play or radial play. If there is any abnormal movement of the reel, up and down, or side to side, adjust or replace components as needed.

CAUTION

To prevent personal injury and damage to the cutting edges, handle the reel with extreme care.

2. Inspect the reel blades and bedknife to insure good sharp edges without bends or nicks.
 - a. The cutting edges of the reel blades and bedknife must be sharp, free of burrs, and show no signs of rounding off.
 - b. The bedknife and bedknife backing must be securely tightened. The bedknife must be straight and sharp.
 - c. A flat surface of 1/32 in. (0.08 cm) minimum must be maintained on the front face of the bedknife. Use a standard flat file to dress the bedknife.
3. If wear or damage is beyond the point where the reel or bedknife can be corrected by the lapping process, they must be reground.
4. Proper reel-to-bedknife adjustment is critical. A gap of 0.001 to 0.003 in. (0.0025 to 0.0076 cm) must be maintained across the entire length of the reel and bedknife.

5. The reel must be parallel to the bedknife. An improperly adjusted reel will lose its sharp edges prematurely and may result in serious damage to the reel and bedknife.
6. Grass conditions will also affect the adjustment.
 - a. Dry, sparse conditions will require a wider gap to prevent heat buildup and damage to the reel and bedknife.
 - b. High quality grass with a good moisture content requires a closer gap (near zero).

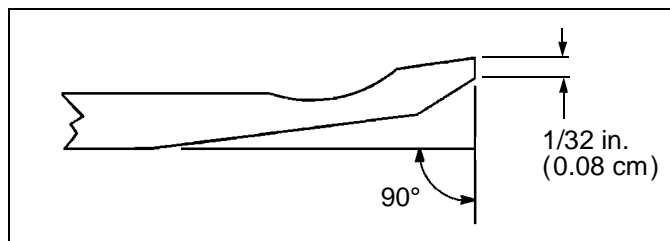


Figure 7A

7.3 BEDKNIFE

1. Read Section 7.2 before making the adjustment.
2. Start adjustment at the leading end of the reel, followed by the trailing end. The leading end of the reel blade is the end that passes over the bedknife first during normal reel rotation.

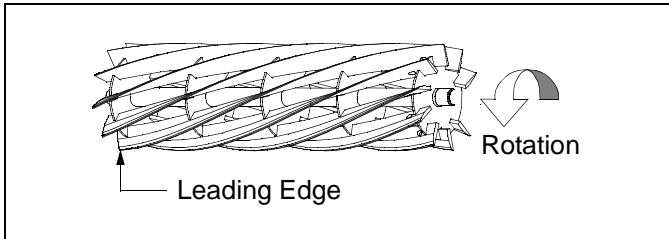


Figure 7B

CAUTION

To prevent personal injury and damage to the cutting edges, handle the reel with extreme care.

3. Loosen nut **(A)**, and turn nut **(B)** clockwise to bring the bedknife closer to the reel or counterclockwise to back the bedknife away from the reel.
 - a. Slide a feeler gauge or shim stock 0.001 - 0.003 in., (0.0025 - 0.0075 cm) between the reel blade and the bedknife. Do not turn the reel.

- b. Adjust the trailing end of the reel in the same manner, then recheck the adjustment at the leading end.

4. Tighten nut **(A)**. Recheck adjustment.

When the reel-to-bedknife is properly adjusted, the reel will spin freely, and will cut a piece of newspaper along the full length of the reel when the paper is held at 90° to the bedknife.

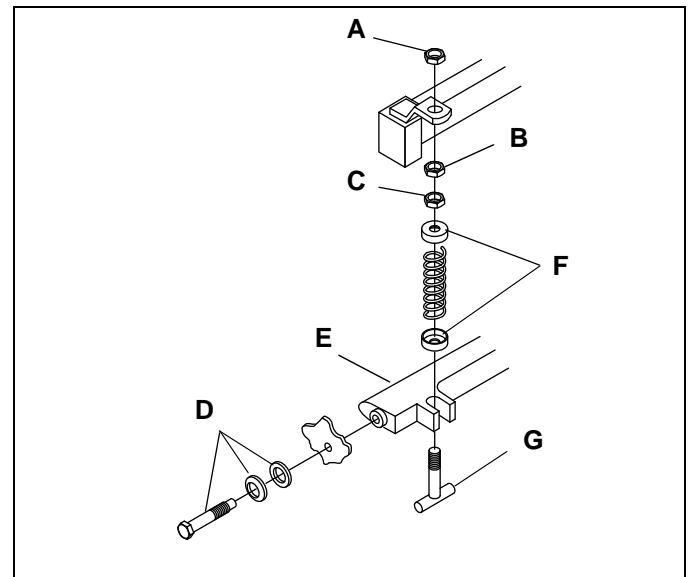


Figure 7C

7.4 BRAKE

A properly adjusted brake requires 10 lb. pull at top of brake lever to engage, and must have 1.50 in. (3.8 cm) center to center when released.

1. Minor adjustments are made at the handle. Loosen nut **(H)**, turn nut **(J)** to adjust the brake cable, then tighten nut **(H)**.
2. If adjustments cannot be made at the handle, remove the transport wheel and make the adjustment at the brake band.
3. Loosen screw **(K)** and pull cable to obtain desired brake tension. Tighten screw **(K)**. Readjust **(H)** and **(J)**.

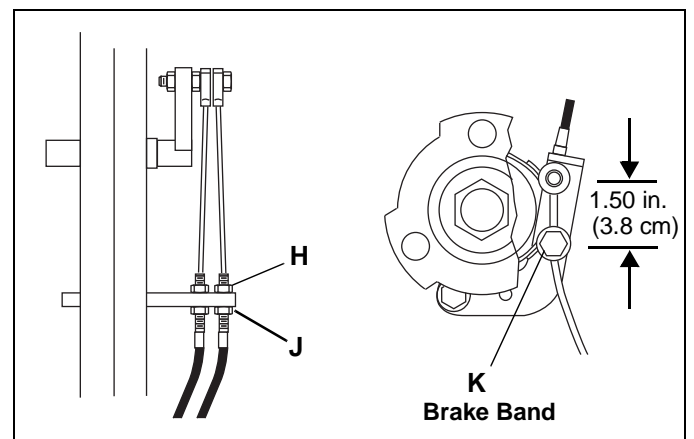


Figure 7D

7 ADJUSTMENTS

7.5 CUTTING HEIGHT

Note: Make sure the bedknife is properly adjusted before setting the cutting height. (Section 7.3).

1. Tip mower back on traction drum or tires. Do not leave the mower tipped back for an extended length of time or oil may migrate into the combustion chamber.
2. Loosen nuts **(M)** on both sides just enough to allow knob **(L)** to raise the front roller or Turf Groomer. Raise both sides an equal amount.
3. Set gauge screw **(P)** to the desired cutting height **(O)**. Measure from the gauge bar **(N)** to the underside of the screw head **(P)** then tighten wing nut to lock the adjustment.
4. Place gauge bar between front roller and traction roller, near the outer end of the rollers.
5. Slide screw head over bedknife **(Q)** and adjust knob **(L)** so roller just contacts the gauge bar. Tighten nut **(M)**.

6. Repeat Steps 4 and 5 on the opposite end of the reel then tighten nuts **(M)**. Recheck and readjust the cutting height if necessary.

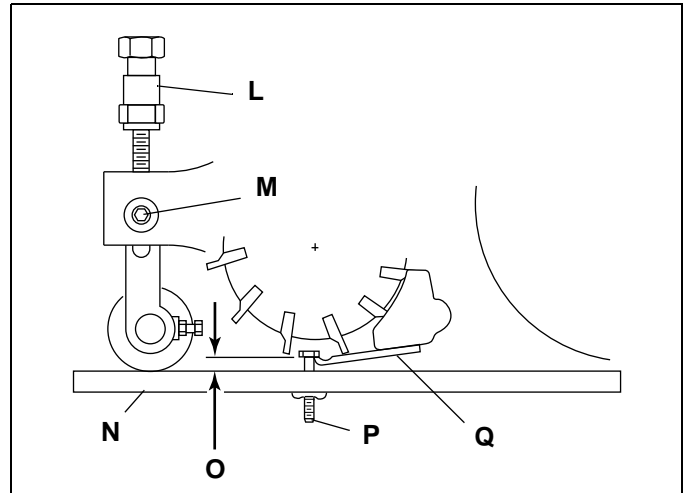


Figure 7E

7.6 HANDLE

1. To adjust the angle of the handle bar **(Y)**, loosen screw **(W)** on both sides of the mower, and adjust the handle bar to the desired position.
2. After adjusting handle bar, adjust bracket **(X)** so that the handle bar just rests on the bottom of the slot in bracket. Tighten screw **(W)**.

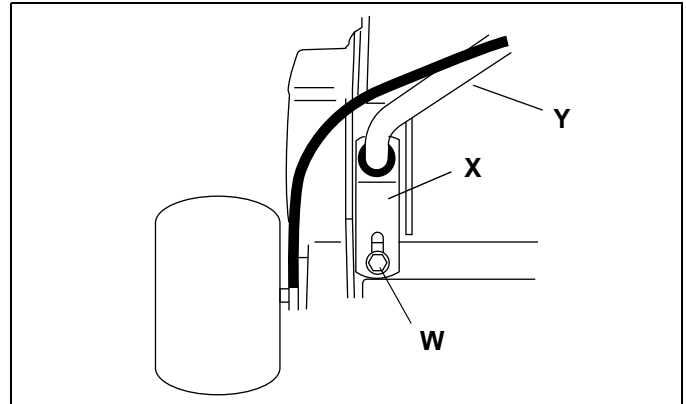


Figure 7F





7.7 TORQUE SPECIFICATION

NOTICE





All torque values included in these charts are approximate and are for reference only. Use of these torque values is at your sole risk. Jacobsen is not responsible for any loss, claim, or damage arising from the use of these charts. **Extreme caution should always be used when using any torque value.**

Jacobsen uses Grade 5 Plated bolts as standard, unless otherwise noted. When tightening plated bolts, use the value given for lubricated.

AMERICAN NATIONAL STANDARD FASTENERS

SIZE	UNITS					SIZE	UNITS				
		GRADE 5		GRADE 8				GRADE 5		GRADE 8	
		Lubricated	Dry	Lubricated	Dry			Lubricated	Dry	Lubricated	Dry
#6-32	in-lb (Nm)	–	20 (2.3)	–	–	7/16-14	ft-lb (Nm)	37 (50.1)	50 (67.8)	53 (71.8)	70 (94.9)
#8-32	in-lb (Nm)	–	24 (2.7)	–	30 (3.4)	7/16-20	ft-lb (Nm)	42 (56.9)	55 (74.6)	59 (80.0)	78 (105)
#10-24	in-lb (Nm)	–	35 (4.0)	–	45 (5.1)	1/2-13	ft-lb (Nm)	57 (77.2)	75 (101)	80 (108)	107 (145)
#10-32	in-lb (Nm)	–	40 (4.5)	–	50 (5.7)	1/2-20	ft-lb (Nm)	64 (86.7)	85 (115)	90 (122)	120 (162)
#12-24	in-lb (Nm)	–	50 (5.7)	–	65 (7.3)	9/16-12	ft-lb (Nm)	82 (111)	109 (148)	115 (156)	154 (209)
1/4-20	in-lb (Nm)	75 (8.4)	100 (11.3)	107 (12.1)	143 (16.1)	9/16-18	ft-lb (Nm)	92 (124)	122 (165)	129 (174)	172 (233)
1/4-28	in-lb (Nm)	85 (9.6)	115 (13.0)	120 (13.5)	163 (18.4)	5/8-11	ft-lb (Nm)	113 (153)	151 (204)	159 (215)	211 (286)
5/16-18	in-lb (Nm)	157 (17.7)	210 (23.7)	220 (24.8)	305 (34.4)	5/8-18	ft-lb (Nm)	128 (173)	170 (230)	180 (244)	240 (325)
5/16-24	in-lb (Nm)	173 (19.5)	230 (26.0)	245 (27.6)	325 (36.7)	3/4-10	ft-lb (Nm)	200 (271)	266 (360)	282 (382)	376 (509)
3/8-16	ft-lb (Nm)	23 (31.1)	31 (42.0)	32 (43.3)	44 (59.6)	3/4-16	ft-lb (Nm)	223 (302)	298 404	315 (427)	420 (569)
3/8-24	ft-lb (Nm)	26 (35.2)	35 (47.4)	37 (50.1)	50 (67.8)	7/8-14	ft-lb (Nm)	355 (481)	473 (641)	500 (678)	668 (905)

METRIC FASTENERS

SIZE	UNITS									Non Critical Fasteners into Aluminum
		4.6		8.8		10.9		12.9		
		Lubricated	Dry	Lubricated	Dry	Lubricated	Dry	Lubricated	Dry	
M4	Nm (in-lb)	–	–	–	–	–	–	3.83 (34)	5.11 (45)	2.0 (18)
M5	Nm (in-lb)	1.80 (16)	2.40 (21)	4.63 (41)	6.18 (54)	6.63 (59)	8.84 (78)	7.75 (68)	10.3 (910)	4.0 (35)
M6	Nm (in-lb)	3.05 (27)	4.07 (36)	7.87 (69)	10.5 (93)	11.3 (102)	15.0 (133)	13.2 (117)	17.6 (156)	6.8 (60)
M8	Nm (in-lb)	7.41 (65)	9.98 (88)	19.1 (69)	25.5 (226)	27.3 (241)	36.5 (323)	32.0 (283)	42.6 (377)	17.0 (150)
M10	Nm (ft-lb)	14.7 (11)	19.6 (14)	37.8 (29)	50.5 (37)	54.1 (40)	72.2 (53)	63.3 (46)	84.4 (62)	33.9 (25)
M12	Nm (ft-lb)	25.6 (19)	34.1 (25)	66.0 (48)	88.0 (65)	94.5 (70)	125 (92)	110 (81)	147 (108)	61.0 (45)
M14	Nm (ft-lb)	40.8 (30)	54.3 (40)	105 (77)	140 (103)	150 (110)	200 (147)	175 (129)	234 (172)	94.9 (70)

8 MAINTENANCE

8.1 GENERAL

WARNING

Before you clean, adjust, or repair this equipment, disengage all drives, engage parking brake, and stop engine to prevent injuries.

Whenever performing maintenance other than carburetor adjustments, remove the spark plug wire, and place the wire away from the plug to prevent accidental starting and bodily injury.

1. Adjustment and maintenance should always be performed by a qualified technician. If proper adjustments cannot be made, contact an Authorized Jacobsen.
2. Inspect the equipment on a regular basis, establish a maintenance schedule, and keep detailed records.
 - a. Keep the equipment clean.
 - b. Keep all moving parts properly adjusted and lubricated.
- c. Replace worn or damaged parts before operating the machine.
- d. Keep all fluids at their proper levels.
- e. Keep shields in place and all hardware securely fastened.
- f. Keep tires properly inflated.
3. Long hair, jewelry, or loose fitting clothing may get tangled in moving parts.
4. Use the illustrations in the Parts Catalog as reference for the disassembly and reassembly of components.
5. Recycle or dispose of all hazardous materials (batteries, fuel, lubricants, anti-freeze, etc.) according to local, state, or federal regulations.
6. Wash the mower and accessories after each use. Keep the equipment clean.
7. Repair damaged metal surfaces and use Jacobsen Orange touch-up paint.

8.2 ENGINE

IMPORTANT: A separate Engine Manual, prepared by the engine manufacturer, is supplied with this machine. Read the engine manual carefully until you are familiar with the operation and maintenance of the engine. Proper attention to the engine manufacturer's directions will assure maximum service life of the engine. To order replacement engine manuals contact the engine manufacturer.

The proper break-in of a new engine can make a considerable difference to the performance and life of the engine.

NOTICE

The mower is designed to operate and cut most efficiently at the preset governor setting. Do not change the engine governor settings or overspeed the engine.

During the break-in period, Jacobsen recommends the following:

1. Operate machine modestly for the first 25 hours at reduced engine speed.
2. Avoid full throttle starts and rapid acceleration.
3. Allow the engine to reach operating temperature before operating at full load.
4. Change the engine oil after the first 20 hours of operation.
5. Refer to Section 8.12 and Engine Manual for specific maintenance intervals.

8.3 ENGINE OIL

Check the engine oil at the start of each day, before starting the engine. If the oil level is low, remove oil filler cap, and add oil as required.

Perform initial oil change after the first 20 hours of operation. Change oil every 100 hours thereafter.

See the engine manufacturer's Owners' Manual for detailed service information.

After adding or changing oil, start and run engine at idle with all drives disengaged for 30 seconds. Shut engine off. Wait 30 seconds and check oil level. Add oil to bring up to FULL mark on dipstick.

Use only SAE 10W30 engine oils with API classification SG,SF/CC,CD.

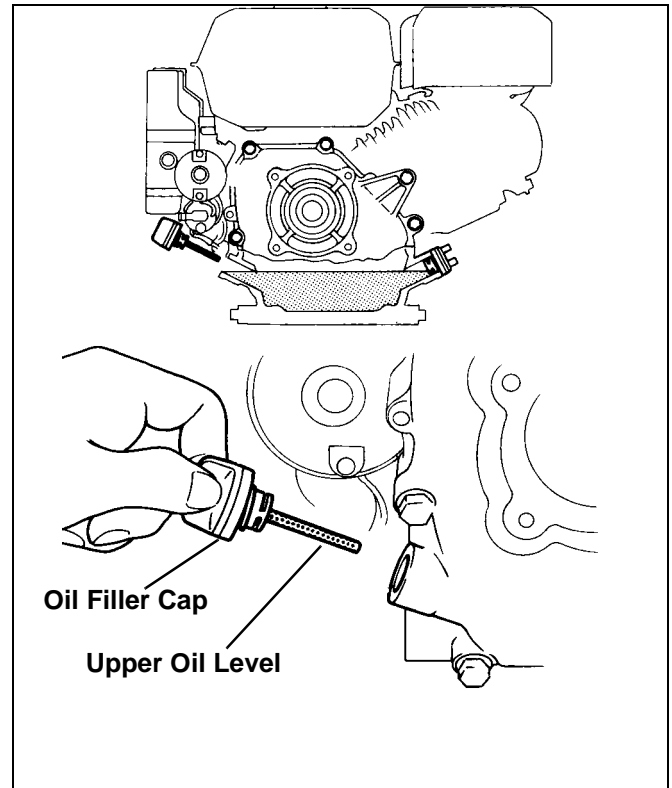


Figure 8A

8.4 FUEL

Handle fuel with care - it is highly flammable. Use an approved container, the spout must fit inside the fuel filler neck. Avoid using cans and funnels to transfer fuel.

WARNING

Never remove the fuel cap from the fuel tank, or add fuel, when the engine is running or while the engine is hot.

Do not smoke when handling fuel. Never fill or drain the fuel tank indoors.

Do not spill fuel and clean spilled fuel immediately.

Never handle or store fuel containers near an open flame or any device that may create sparks and ignite the fuel or fuel vapors.

Be sure to reinstall and tighten fuel cap securely.

- Store fuel according to local, state, or federal ordinances, and recommendations from your fuel supplier.

- Never overfill or allow the tank to become empty.
- Use clean, fresh, regular grade, unleaded gasoline minimum 86 Octane. Refer to the engine's operator manual for fuel recommendations when using blended fuel.
- See engine manual before using oxygenated (blended) fuel.
- Do not fill above the fuel filler neck.

8 MAINTENANCE

8.5 BEDKNIFE SHOE REMOVAL

1. To remove the shoe (E), loosen nut (A), and turn nuts (B) counterclockwise 1/4 turn or more to bring the bedknife into light contact with the reel blades.
2. Remove mounting hardware (D) from both sides of the shoe.
3. Turn locknut (C) counterclockwise until the shoe ends are relieved of all spring pressure.
4. Rotate shoe ends out from between spring cups (F) and rod (G).
5. To replace bedknife shoe, place shoe ends between spring cups and adjusting rod ends, rotate shoe into position.
6. Align shoe mounting holes with frame and reassemble hardware (D).
7. Adjust the reel-to-bedknife. Tighten all hardware.

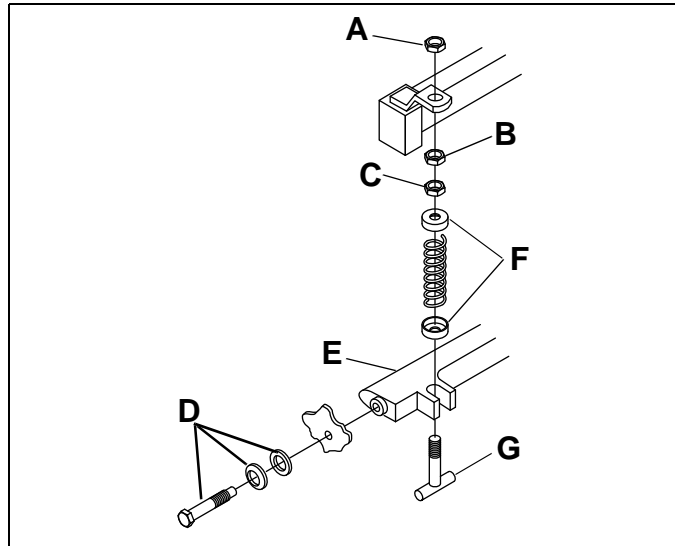


Figure 8B

8.6 BACKLAPPING AND GRINDING

Check for damage to the bedknife and reel blades. Refer to Section 7.2.

1. Determine if backlapping or grinding will restore the proper cutting edge.
2. For optimum performance use a bedknife grinder to touch-up the blade then reassemble and adjust the reel-to-bedknife as described in Section 7.3.
3. Disengage reel clutch and tip machine back to rest on the handle.

NOTICE

Do not leave the mower tipped back for an extended length of time or oil may migrate into the combustion chamber.

4. Remove shaft cover and gasket from left side of reel. Assemble a 3/8-24 bolt and locknut to the end of the shaft, and attach to lapping machine.
 - a. Apply lapping compound with a long handle brush along the entire length of the reel, (120 grit is recommended, Section 2.6).
 - b. Continue lapping, and at the same time make a fine adjustment on the reel and bedknife until there is a uniform clearance along the full length of the cutting edges.
5. Carefully and thoroughly remove all lapping compound from reel and bedknife *before running the reel in forward direction*.

8.7 TRANSPORT TIRES (OPTION)

1. Keep tire properly inflated to prolong tire life. Check pressure only when the tires are cool.
2. Use an accurate, low pressure tire gauge. 6 - 8 psi - (0.413 - 0.551 BAR).

CAUTION

Unless you have the proper training, tools, and experience, DO NOT attempt to mount a tire on a rim. Improper mounting can produce an explosion that may result in serious injury.

8.8 WHEEL BEARING

The bearing has the word LOCK and an arrow stamped on the face. When replacing the bearing, make absolutely certain that the bearing is installed in the proper direction of rotation.

For the **Right** wheel, install the bearing with the LOCK➔ arrow to the **Outside** of the housing.

For the **Left** wheel, install the bearing with the LOCK➔ arrow to the **Inside** of the housing.

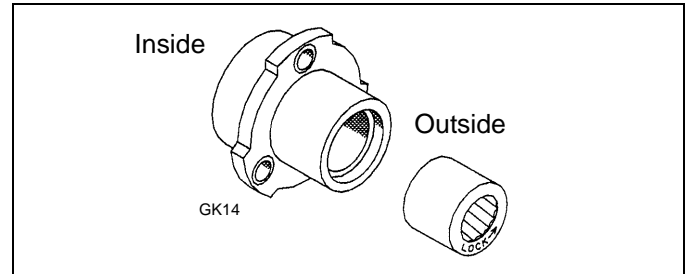


Figure 8C

8.9 STORAGE

General

1. Clean the mower thoroughly and lubricate. Whenever possible, use compressed air to clean mower.
2. Repair and paint damaged or exposed metal.
3. Inspect the mower, tighten all hardware, replace worn or damaged components. Refurbish the reel and bedknife.
4. Back the bedknife away from the reel and apply a light coat of rust preventative oil on the reel blades and bedknife,
5. Store the mower on kickstand so the load is off the tires. The front roller or Turf Groomer should be resting on a wood board.
6. Keep the mower and all its accessories clean, dry, and protected from the elements during storage. Never store equipment with fuel in the tank inside a building where fumes may reach an open flame or spark.
7. Do not store near flammable debris.

Engine

1. While the engine is warm, remove drain plug, drain the oil from the crankcase. Install drain plug and refill with fresh oil. Torque drain plug to 22 ft. lb. (30 Nm).
2. Clean exterior of engine. Paint the exposed metal or apply a light coat of rust preventative oil.
3. To prevent the build-up of gum residues and vanish films, fill the tank with stabilized fuel. Use an anti-oxidant fuel conditioner, such STA-BIL®. Read and follow the instructions on the container.
4. Operate the engine for about 5 minutes to distribute the treated fuel. Stop the engine, close the fuel shut-off valve, and let the engine cool. Drain fuel.

5. Remove the spark plug, and pour about one ounce of SAE 30 oil into the cylinder. Crank engine slowly by hand to distribute oil over the cylinder wall. Replace the spark plug.
6. Pull the starter rope slowly until resistance is felt. Continue pulling until the notch on the starter pulley aligns with the hole on the recoil starter. At this point, the intake and exhaust valves are closed.

After Storage

1. Check or service the fuel filter and air cleaner.
2. Check oil level in the engine crankcase.
3. Fill the fuel tank with fresh fuel. Open fuel shut off valve.
4. Remove all oil from the cutting edges. Readjust reel-to-bedknife and cutting height.
5. Support mower so traction drum is off the ground and disengage reel clutch. Start the engine, and operate at 1/2 throttle. Allow enough time for the engine to become properly warmed and lubricated.

NOTICE

The traction drum will rotate with engine running at 1/2 throttle.



WARNING

Never operate the engine without proper ventilation. Exhaust fumes can be fatal if inhaled.

8 MAINTENANCE

8.10 TROUBLESHOOTING

Before making any adjustments or performing maintenance, read maintenance section for procedures and warnings.

Symptoms	Probable Causes	Solution
Engines does not start.	Choke in wrong position. Empty fuel tank or dirty fuel. Fuel shut-off valve. Engine / Spark Plug. Engine switch off.	See Engine Manual. Drain and refill with fresh, clean fuel. Open valve. See Engine Manual. Turn on switch.
Engine hard to start or runs erratically, stalls, loses power or stops.	Choke in wrong position. Fuel leaks. Dirty or incorrect fuel. Loose wiring. Air intake plugged. Vent in fuel cap plugged.	See Engine Manual. Tighten fuel hose clamps. Refill with proper grade, clean fuel. Check spark plug wire. Clean air-intake and air cleaner. Clean fuel cap.
Mower does not react to O.P.C. lever.	Parking brake engaged. Reel clutch disengaged.	Disengage brake. See Section 5.2.
Reel does not cut, cuts unevenly.	Misadjusted. Position of reel clutch lever.	Adjust, see (Section 7.2, Section 7.3, and Section 7.5). Engage lever.

8.11 LUBRICATION

The mower was designed for minimum lubrication. Over greasing will produce high loads on the bearings and engine, thereby reducing the performance of the machine.

NOTICE

All maintenance intervals must be performed more frequently when operating in extremely dusty conditions.

1. Always clean the grease fitting before and after lubricating.
2. Apply grease with a manual grease gun and fill slowly until grease begins to seep out. DO NOT use compressed air guns.
3. For smooth operation of pivot points and other friction points, apply several drops of SAE 30W oil.

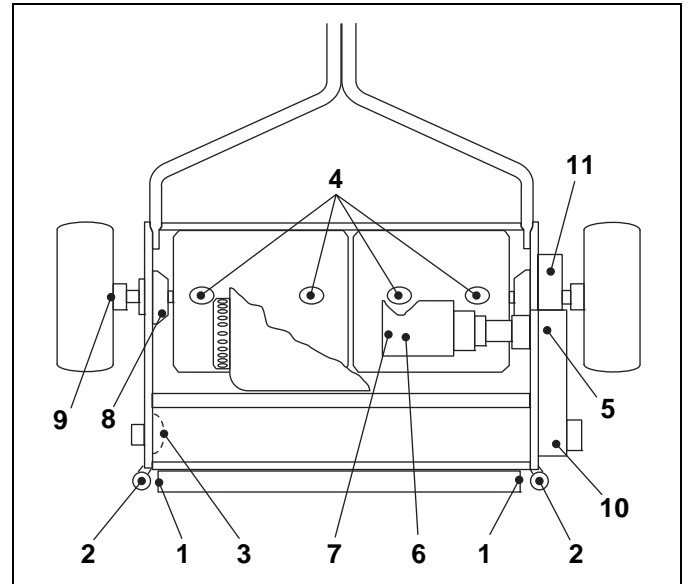


Figure 8D

8.12 MAINTENANCE CHART

Recommended Inspection and Lubrication Intervals.

	Daily	20	50	100	300	Yearly	Lubricant
Air Cleaner.....	I						C
Combustion Chamber.....							C
Engine Oil	I	R		R			I
Fuel Line.....						R - 2 yrs	
Spark Plug				A/R			
Valve Clearance.....						A	
Grease Locations (Figure 7C)							
1 - Roller		L				L	II
2 - Height Adj.			L				II
3 - RT Reel Shaft		L					II
4 - Traction Roller.....		L					II
5 - Clutch Shaft Bearing					L		II
6 - Clutch Pivot Shaft					L		III
7 - Clutch Needle Bearing.....							III★
8 - Traction Hub		L					III
9 - Wheel Bearings					L		II
10 - Reel Clutch Lever		L					II
11 - Chain Case						R	IV

A - Add or Adjust C - Clean I - Inspect L - Lubricate R - Replace

Lubricants

- I - SAE 10W-30 Classified API SF or SG.
- II - Lithium Grease NLGI - Grade 2.
- III - Lubriplate® grease, Jacobsen Part No. 5001581
- IV - SAE EP-140 Oil - Drain and Refill
- ★ - Apply a light coat

10.1 HOW TO USE THE PARTS CATALOG

Abbreviations

N/S - Not serviced separately, can only be obtained by ordering main component or kit.

AR -Variable quantity or measurement is required to obtain correct adjustment.

Symbols such as ●, next to the item number, indicate that a note exists which contain additional information important in ordering that part.

Indented Items

Indented items indicate component parts that are included as part of an assembly or another component. These parts can be ordered separately or as part of the main component.

Item	Part No.	Qty	Description	Serial Numbers/Notes
● 1	123456	1	Mount, Valve	<i>Indicates a piece part Includes Items 2 and 3 Serviced part included with Item 2 Non serviced part included with Item 2</i>
2	789012	1	Valve, Lift	
3	345678	1	• Handle	
4	N/S	1	• Seal Kit	
5	901234	1	Screw, 1/4-20 x 2" Hex Head	

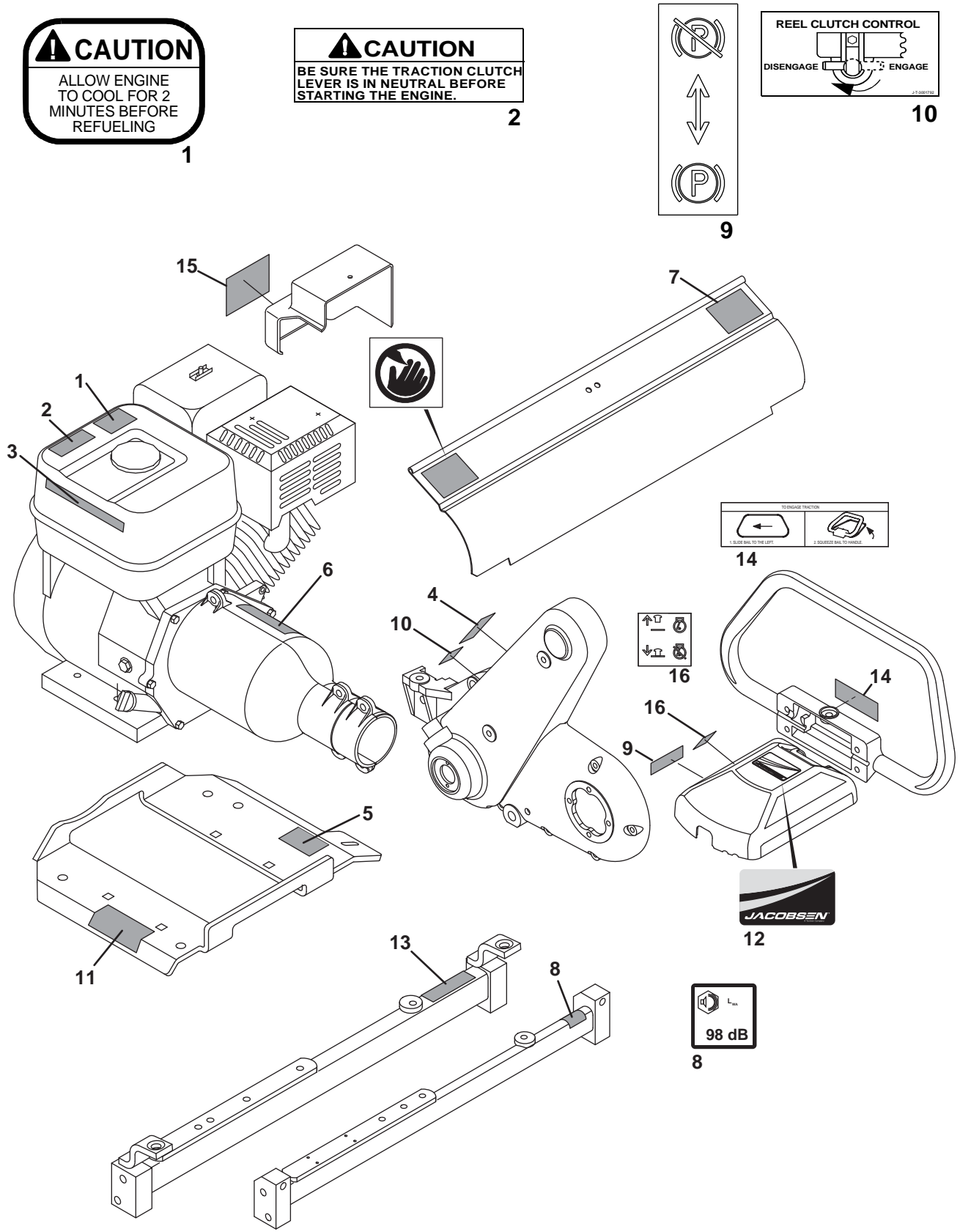
10.2 TO ORDER PARTS

1. Write your **full** name and **complete** address on the order.
2. Explain where and how to make shipment.
3. Give product number, name and serial number that is stamped on the name plate or serial plate of your product.
4. Order by the quantity desired, the part number, and description of the part as given in the parts list.
5. Send or bring the order to an authorized Jacobsen Distributor.
6. Inspect all shipments on receipt. If any parts are damaged or missing, file a claim with the carrier before accepting.
7. Do not return material without a letter of explanation, listing the parts being returned. Transportation charges must be prepaid.

10.3 PARTS CATALOG TABLE OF CONTENTS

- 1.1 Decals 36
- 2.1 Handle and Controls 38
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- 5.1 Right Side Frame 44
- 6.1 Cross Bars, Reel and BedKnife 46
- 7.1 Engine and Clutch..... 48
- 8.1 Traction Rollers 50
- 9.1 Transport Wheels..... 52

1.1 Decals



! PRECAUCION

1. No opere esta maquina sin previo entrenamiento, instruccion y sin haber leído el manual de operacion.
2. Tenga todas las guardas en su lugar y piezas bien aseguradas.
3. Neutralice todas las velocidades y apague el motor antes de vaciar los recolectores de pasto, darle servicio, limpiar, ajustar y destrabar la maquina.
4. Mantenga las manos, los pies y ropa suelta lejos de piezas en movimiento.
5. No deberan transportar pasajeros si no existe un asiento para ellos.
6. Si no sabe leer ingles, pida que alguien le lea las calcomanias de avisos y los manuales de instruccion y operacion.

5

! CAUTION

1. Read operators manual before operating machine.
2. Keep shields in place and hardware securely fastened..
3. Before you clean, adjust or repair this equipment, disengage all drives, engage parking brake and stop engine.
4. Keep hands, feet and clothing away from moving parts.
5. Never carry passengers.
6. Keep bystanders away.

6

! DANGER

To avoid serious bodily injury stop engine and disengage reels before working on mower or emptying baskets.



11

PGM 22

3

Vehicle Mass:

Model PGM 19	84.0 kg
Model PGM 22	85.0 kg
Model 518A	95.3 kg
Model 522TA	100.7 kg
Model 522A	101.2 kg
Model 526A	123.4 kg
Model TC22	101.1 kg

! WARNING

Keep Bystanders Away. Do Not Operate Without Guards In Place

2811102

4

! WARNING

TO PREVENT INJURY AND ACCIDENTAL CLUTCH ENGAGEMENT DO NOT ADJUST ENGINE SPEED USING THROTTLE LEVER ON ENGINE. ALWAYS ADJUST ENGINE SPEED USING THE OPC HANDLE AND THROTTLE PADDLE

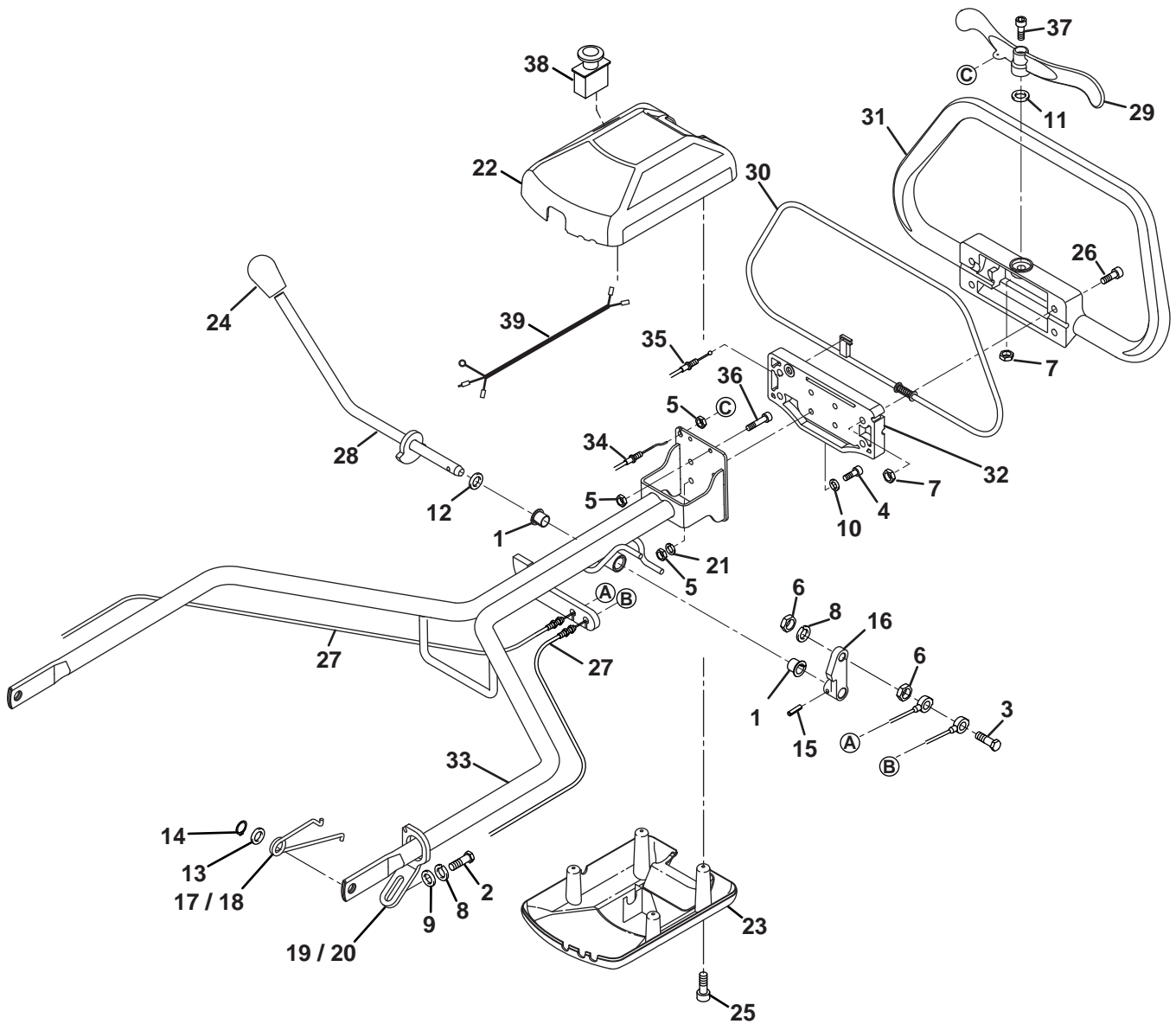
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Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	362764	1	Decal, Caution	
2	3001790	1	Decal, Caution	
3	4125685	1	Decal, PGM 22	
4	2811102	1	Decal, EU	
5	340830	1	Decal, Spanish	
6	361854	1	Decal, Caution	
7	4127335	1	Decal, Danger	
8	4131528	1	Decal, Noise 98 dB	
9	3002753	1	Decal, Parking Brake	
10	3001792	1	Decal, Reel Clutch	
11	3001235	1	Decal, Danger	
12	4182386	1	Decal, Jacobsen Emblem	
13	NS	1	Plate, Serial	
14	4139678	1	Decal, Bail Operation	
15	4146636	1	Decal, Throttle Warning	
16	4147495	1	Decal, E-Stop	

> Change from previous revision

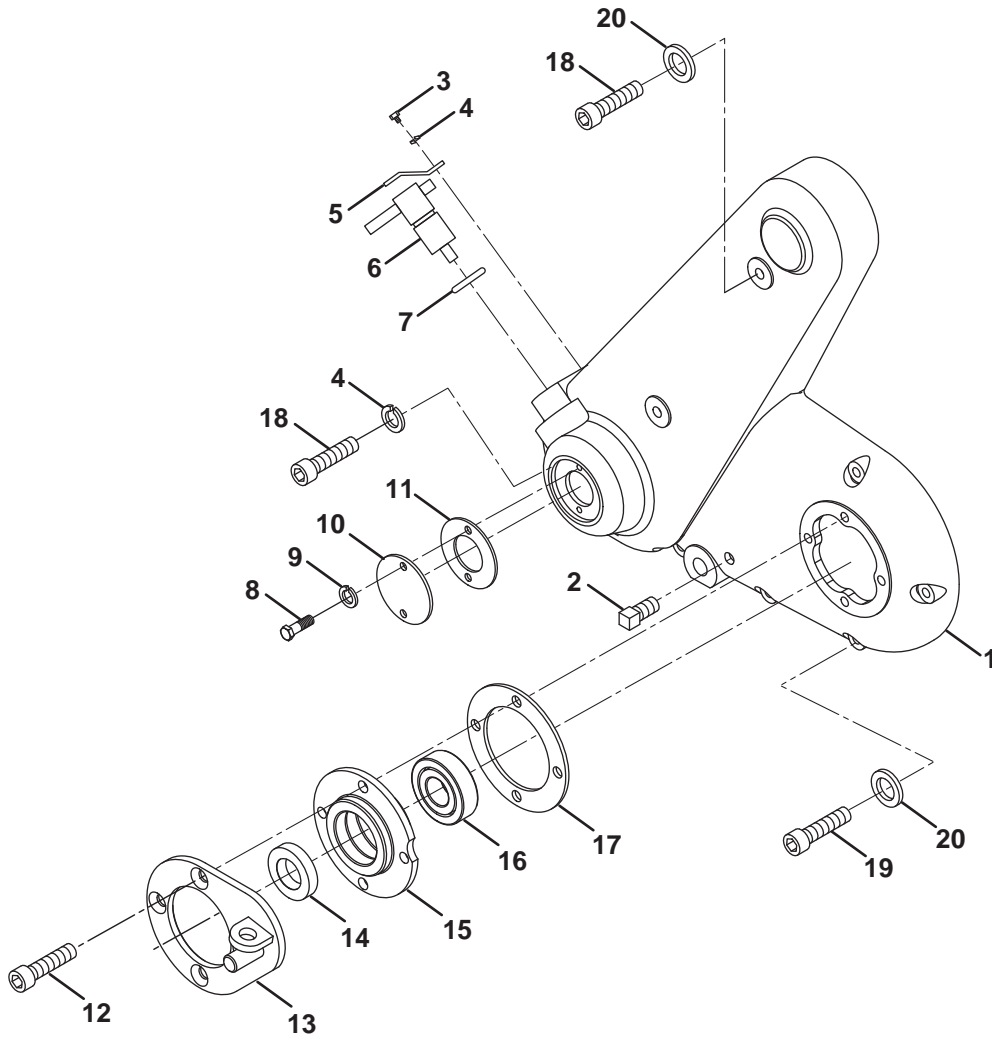
2.1 Handle and Controls



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	366708	2	Flanged Bearing	
2	400262	2	Screw, 3/8-16 x 1" Hex Head	
3	400268	1	Screw, 3/8-16 x 1-3/4" Hex Head	
4	434029	4	Screw, 1/4-20 x 1" Socket Head	
5	443102	7	Nut, 1/4-20 Hex	
6	443110	2	Nut, 3/8-16 Hex	
7	444718	5	Locknut, 5/16-18 Center	
8	446142	3	Lockwasher, 3/8 Heavy	
9	453011	2	Flat Washer, 3/8	
10	453023	4	Flat Washer, 1/4	
11	454020	1	Washer, 1/2 Spring	
12	454025	AR	Washer, 1/2 Spring	
13	455012	2	Flat Washer, 3/4	
14	458006	2	Retaining Ring, 1/2 Truarc	
15	461181	1	Groove Pin, 3/16 x 3/4"	
16	2000067	1	Lever, Brake	
17	2809900	1	Left Side Torsion Spring	
18	2809901	1	Right Side Torsion Spring	
19	4117380	1	Right Side Handle Stop	
20	4117381	1	Left Side Handle Stop	
21	446130	4	Lockwasher, 1/4 Heavy	
22	4147697	1	Cover, Front	
23	4127051	1	Cover, Back	
24	4127340	1	Knob	
25	4128662	4	Screw, #10-32 x 3/8" Socket Head	
26	4128933	4	Screw, 5/16-18 x 1-1/2" Socket Head	
27	4130762	2	Brake Cable, PGM	
28	4131414	1	Lever, Brake	
29	4136323	1	Plate, Throttle	
30	4136325	1	Bail Lever	
31	4147696	1	Handle, Overmolded	
32	4136328	1	Plate, Tilt	
33	4136539	1	Handle, PGM	
34	4136551	1	Cable, Paddle Throttle	See 7.1 for Engine Connection
35	4136552	1	Cable, Bail Throttle	See 7.1 for Engine Connection
36	434054	2	Screw, 1/4-20 x 1-3/4 Socket Head	
37	434032	1	Screw, 5/16-18 x 1-3/4" Socket Head	
38	4147835	1	E-Stop Switch	
39	4147215	1	Harness, E-Stop	

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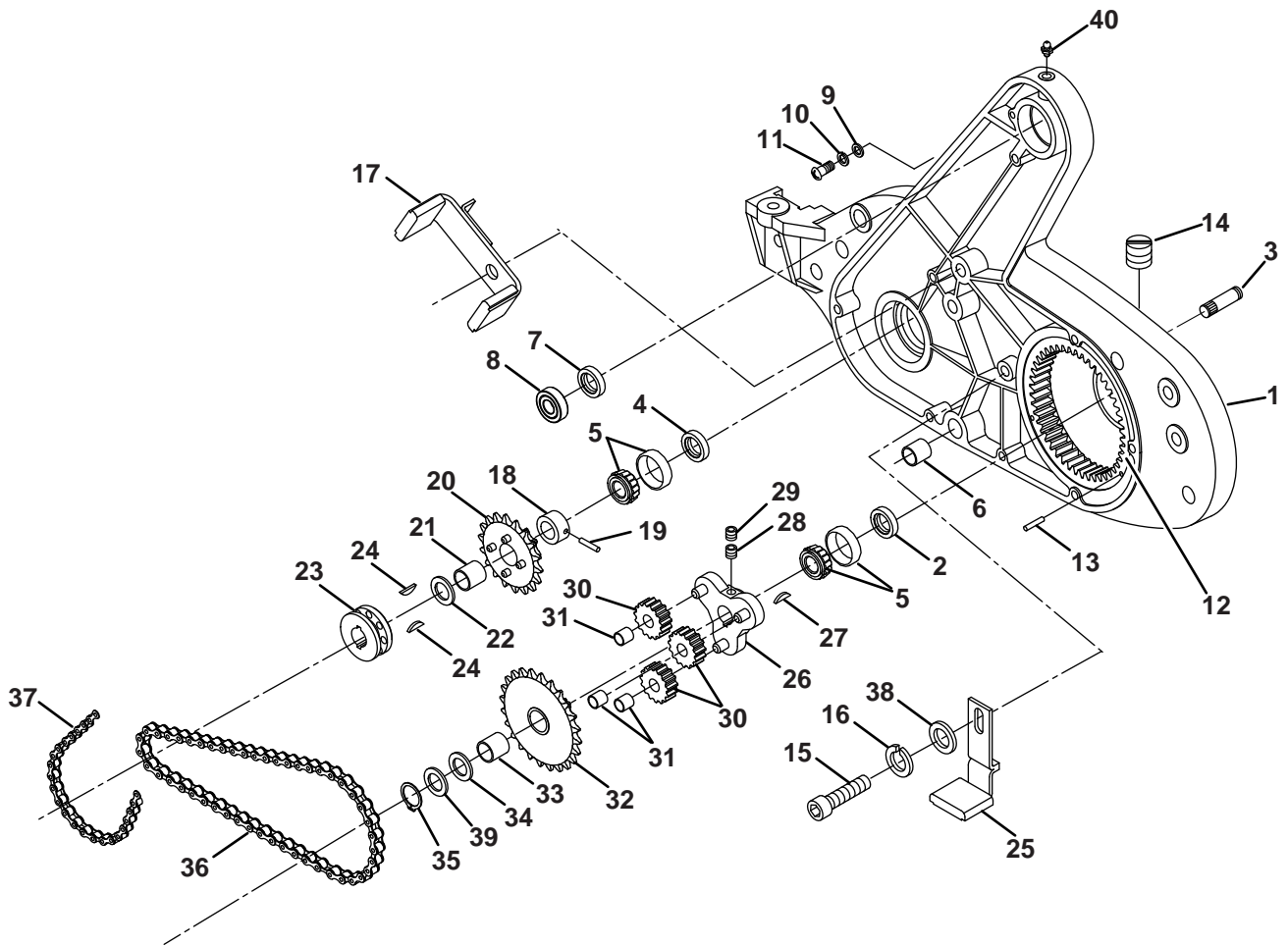
3.1 Left Chain Cover



Item	Part No.	Qty.	Description	Serial Numbers/Notes	
●▲	1	207480	1	Cover, Chain	
	2	472201	1	Plug, 1/8 Pipe, Square Head	
◆	3	400102	1	Screw, 1/4-20 x 3/8" Hex Head	
	4	446130	4	Lockwasher, 1/4 Heavy	
	5	304756	1	Retainer	
	6	503438	1	Lever, Shift	
	7	339910	1	• O-Ring	
◆	8	403528	2	Screw, #8-32 x 3/8" Hex Head	
	9	446110	2	Lockwasher, #8 Medium	
	10	304758	1	Cover	
	11	304757	1	Gasket	
◆	12	434041	4	Screw, 1/4-20 x 3/4" Flat Soc Hd	
	13	1001309	1	Bracket, L.H. Brake Mounting	
	14	313777	1	Seal, Oil	
●▲	15	3002906.7	1	Housing, Bearing	
	16	303566	1	Bearing	
	17	304747	1	Gasket	
◆	18	434043	3	Screw, 1/4-20 x 2-1/4" Socket Head	
◆	19	434042	5	Screw, 1/4-20 x 1-1/2" Socket Head	
	20	3006511	5	Washer	
Required for proper sealing of Left Side Frame					
●	473194	AR	Loctite Primer	6 oz Aerosol Can	
▲	473195	AR	Loctite 518 Gasket Eliminator	15 oz cartridge	
◆	473130	AR	Loctite 242 (Blue)		

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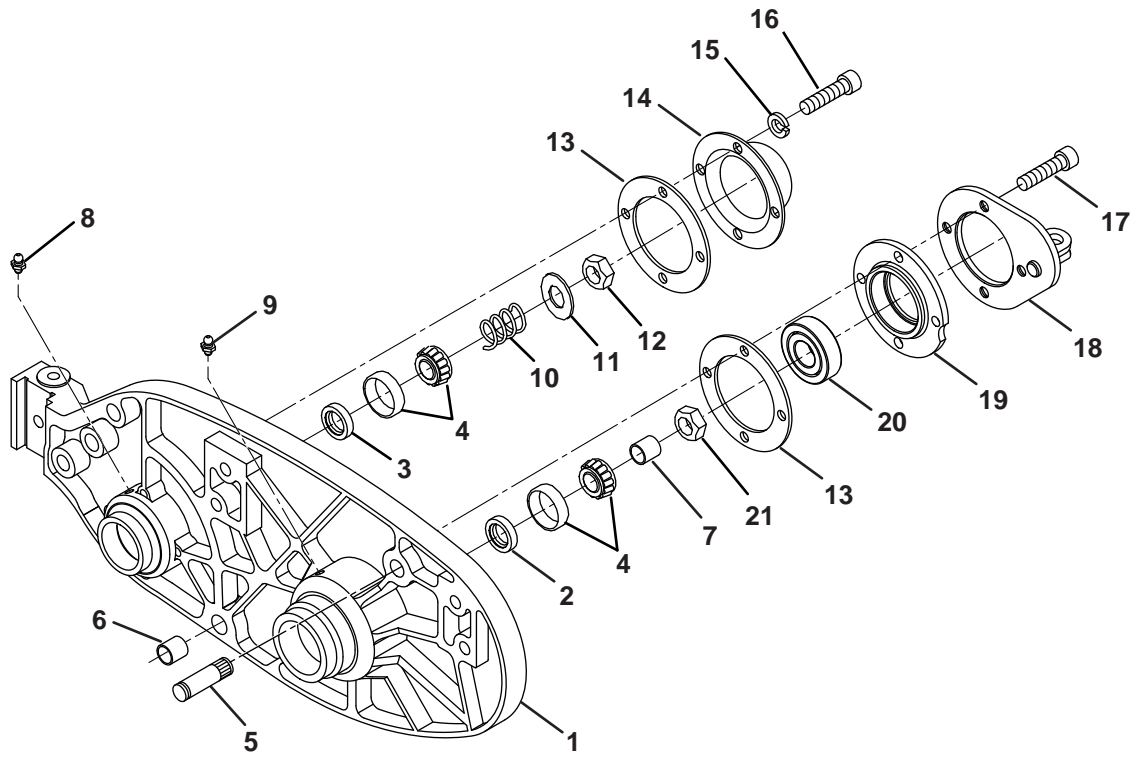
4.1 Left Side Frame



Item	Part No.	Qty.	Description	Serial Numbers/Notes	
●	1	2811557	1	Frame, L.H.	
	2	337677	1	• Seal, Oil	
	3	2811124	1	• Stud, Handle	
	4	336962	1	• Seal, Oil	
	5	500534	2	• Bearing Cup and Cone	
	6	2500759	2	• Bushing	
	7	365753	1	• Seal, Grease	
	8	303490	1	• Bearing	
	9	307959	1	• Washer	
	10	446116	1	• Lockwasher, #10 Medium	
	11	403912	1	• Screw, #10-24 x 5/8" Truss Head	
	12	2500463	1	• Gear, Internal	
	13	461165	3	• Pin, 5/32 x 1/2" Groove, Type 1	
	14	472005	1	Plug, 3/8 Pipe, Headless	
◆	15	434028	1	Screw, 1/4-20 x 3/4" Soc Head	
	16	446130	1	Lockwasher, 1/4 Heavy	
	17	106790	1	Guide, Chain	
	18	325654	1	Collar	
	19	461173	1	Pin, 5/32 x 1" Groove, Type 1	
	20	503448	1	Sprocket, Reel	
	21	304743	1	• Bushing	
	22	304745	1	Washer	
	23	304746	1	Clutch, Reel	
	24	463113	2	Key, 3/4 x 3/16 Morton	
	25	1004944	1	Guide, Chain	
	26	2500020	1	Planetary Gear Set Spider	
	27	463017	1	Key, Woodruff #9	
	28	415007	1	Screw, 5/16-18 x 3/8" Set , Soc Hd	
	29	428511	1	Screw, 5/16-18 x 5/16" Set , Soc Hd	
	30	2500024	3	Pinion, Idler	
	31	304718	3	• Bushing	
	32	131832	1	Drive Pinion and Socket	
	33	304730	1	• Bushing	
	34	307374	AR	Washer, Thrust	
	35	458013	1	Ring, Retaining	
	36	364079	1	Chain, Reel to Traction Shaft	
	37	500326	1	Chain, PTO to Reel	
		470503	1	• Link, Chain	
	38	453023	1	Washer, 1/4 Flat	
	39	306828	AR	Washer, Thrust	
	40	471214	1	Fitting, Grease	
	Required for proper sealing of Left Side Frame				
●	473194	AR	Loctite Primer	6 oz Aerosol Can	
◆	473130	AR	Loctite 242 (Blue)		

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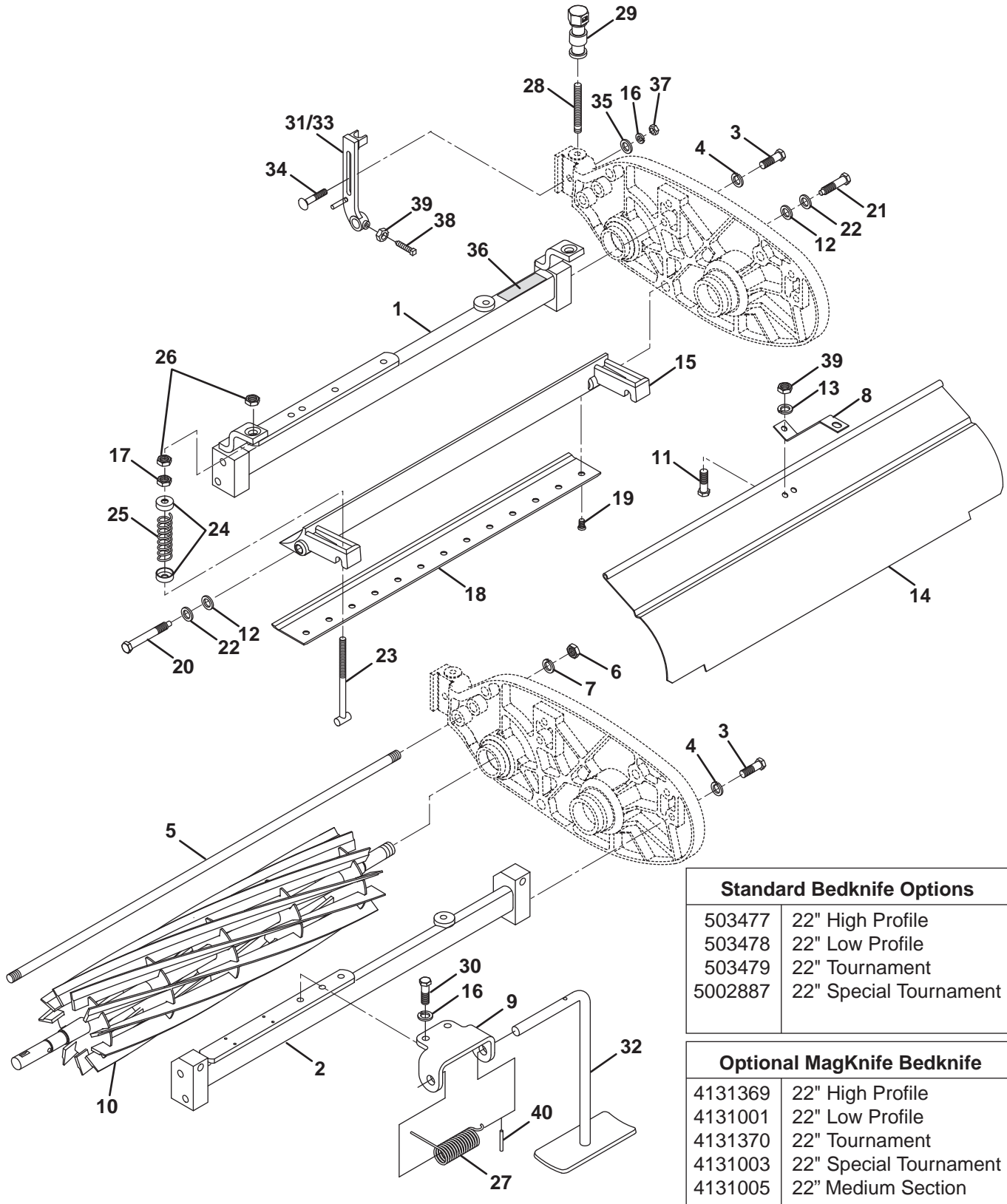
5.1 Right Side Frame



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	2811558	1	Frame, R.H.	
2	337677	1	• Seal, Oil	
3	336962	1	• Seal, Oil	
4	500534	2	• Bearing Cup and Cone	
5	2811124	1	• Stud, Handle	
6	2500759	1	• Bushing	
7	307377	1	Spacer, Shaft	
8	471223	1	Fitting, Grease	
9	471214	1	Fitting, Grease	
10	363047	1	Spring, Tension	
11	453020	1	Flat Washer, 5/8	
12	444713	1	Locknut, 5/8-16 Center Jam	
13	304747	2	Gasket	
14	348847	1	Cover, Reel Bearing	
15	446130	4	Lockwasher, 1/4 Heavy	
16	434028	4	Screw, 1/4-20 x 3/4" Socket Hd	
◆	434041	4	Screw, 1/4-20 x 3/4" Flat Socket Hd	
18	1001308	1	Bracket, R.H. Brake Mounting	
19	3002907.7	1	Housing, Bearing	
20	343667	1	Bearing, Ball	
21	367029	1	Locknut, 3/4-16 Hex Jam	
◆	473130	AR	Loctite 242 (Blue)	

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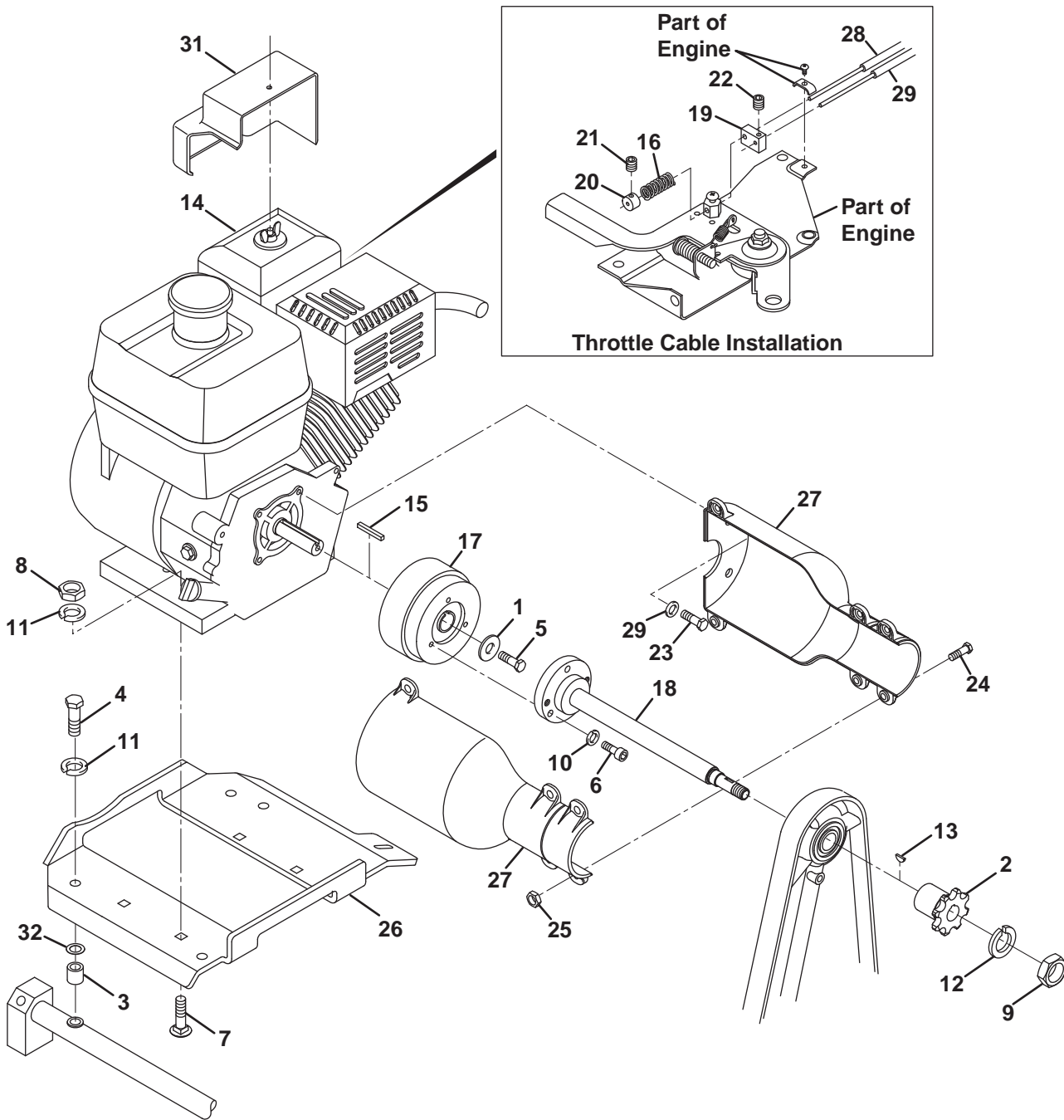
6.1 Cross Bars, Reel and BedKnife



Item	Part No.	Qty.	Description	Serial Numbers/Notes	
●▲	1	122544	1	Cross Bar, Front	
	2	122545	1	Cross Bar, Rear	
	3	400266	8	Screw, 3/8-16 x 1-1/2"	
	4	446142	8	Lockwasher, 3/8 Heavy	
	5	304740	1	Tie Rod, Front	
	6	443114	2	Nut, 7/16-14 Hex	
	7	446148	2	Lockwasher, 7/16	
	8	363328	1	Strap, Grass Shield	
	9	343732	1	Bracket, Support	
	10	5002605	1	Reel, 22" 11 Blade	
	10	4284053	1	Reel, 22" 15 Blade	
	11	400106	1	Screw, 1/4-20 x 5/8" Hex Head	
	12	348849	AR	Shim	
	13	446130	1	Lockwasher, 1/4 Heavy	
	14	4139463	1	Shield, Grass	
	15	500627	1	Shoe, Bedknife	
	15	4130298	1	Bedknife Backing, PGM MagKnife	Optional MagKnife
	16	446136	4	Lockwasher, 5/16 Heavy	
	17	443112	2	Nut, 3/8-24 Hex	
	18	See Chart	1	Bedknife	
	19	3009138	13	Screw, 1/4-20 x 1/2" Flat Head	
	20	365502	1	Screw, L.H. Bedknife Mounting	Apply Never Sieze to bolt
	21	365501	1	Screw, R.H. Bedknife Mounting	Apply Never Sieze to bolt
	22	454017	2	Washer, Shakeproof Cone	
	23	332516	2	Rod, Bedknife Adjusting	
	24	307456	4	Cup, Bedknife Adjusting Spring	
	25	307360	2	Spring, Bedknife Adjusting	
	26	350626	4	Nut, Bedknife Adjusting	
	27	307373	1	Support, Spring	
	28	343616	2	Stud	
	29	3005692	2	Nut, Roller Adjusting	
	30	400184	2	Screw, 5/16-18 x 3/4" Hex Head	
	31	3008438	1	Bracket, R.H. Roller	
	32	103399	1	Support Rod and Foot Rest	
	33	3008439	1	Bracket, L.H. Roller	
	34	441677	2	Bolt, 5/16-18 x 1-1/2" Carriage	
	35	452006	2	Washer, 5/16 Flat	
	36	NS	1	Plate, Serial	
	37	443106	2	Nut, 5/16-18 Hex	
	38	352737	2	Screw, 1/4-20 x 7/8" Set, Sq Head	
	39	443102	3	Nut, 1/4-20 Hex	
	40	461181	1	Pin, 3/16 x 3/4" Groove	
	Required for proper sealing of Left Side Frame				
●	473194	AR	Loctite Primer	6 oz Aerosol Can	
▲	473195	AR	Loctite 518 Gasket Eliminator	15 oz cartridge	

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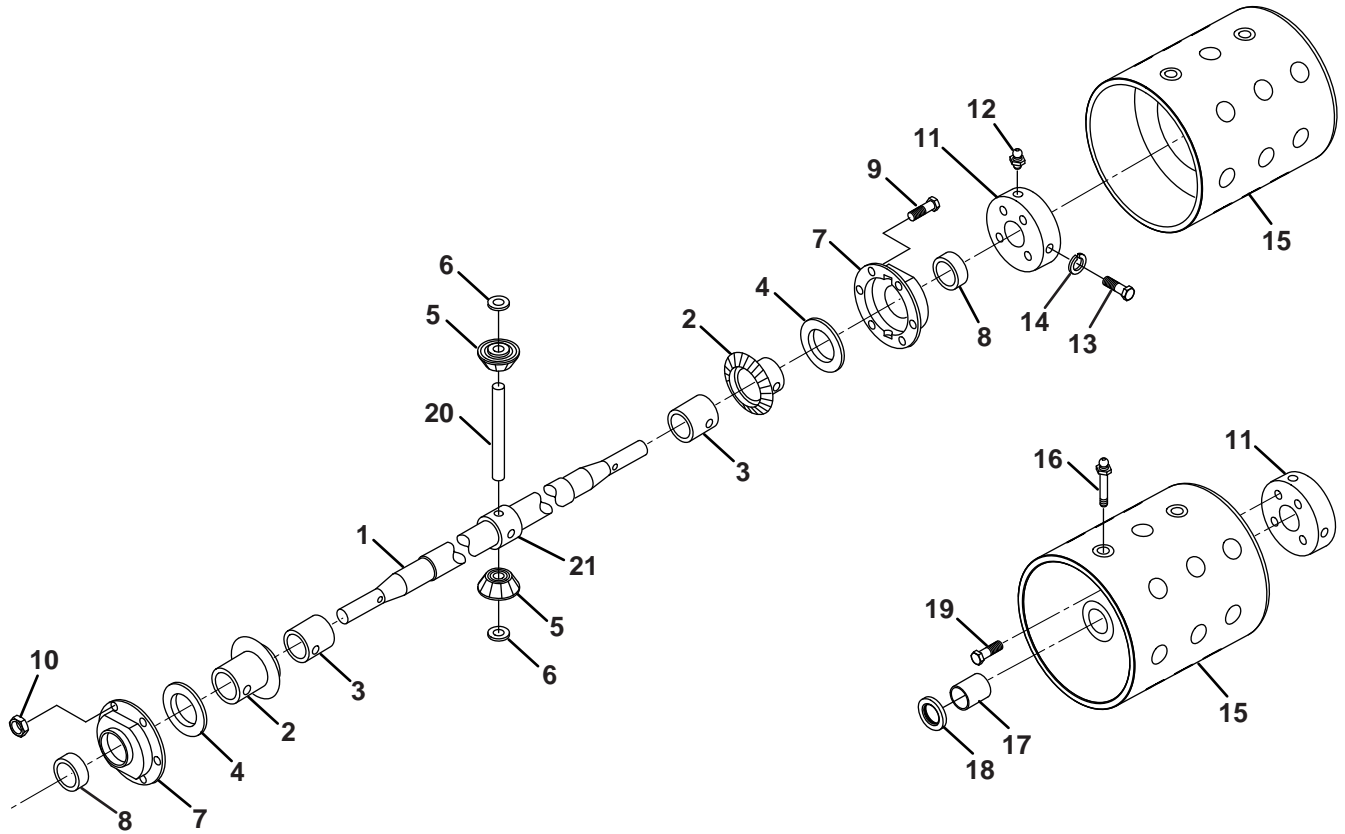
7.1 Engine and Clutch



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	303873	1	Washer	
2	309756	1	Sprocket,	
3	365658	4	Spacer, Engine Mounting	
4	400194	4	Screw, 5/16-18 x 1-3/4" Hex Head	
5	306369	1	Screw, 5/16-24 x 1" Hex Head	
6	434029	3	Screw, 1/4-20 x 1" Socket Head	
7	441677	4	Carriage Bolt, 5/16-18 x 1-1/2"	
8	443106	4	Nut, 5/16-18 Hex	
9	443820	1	Nut, 1/2-20 Hex Jam	
10	446130	3	Lockwasher, 1/4 Heavy	
11	446136	8	Lockwasher, 5/16 Heavy	
12	446154	1	Lockwasher, 1/2 Heavy	
13	463003	1	Key, 1/2 x 1/8" Woodruff	
14	503532	1	Engine, 4HP Honda	
15	320774	1	• Key, 3/16 x1-1/2" Square	
16	4108643	1	Spring, Throttle Plate	
17	4135990	1	Torque Clutch	Engages at 2000 RPM
18	4245695	1	Clutch Shaft, PGM	
19	4136549	1	Guide, Cable	
20	4136554	1	Collar, Cable Stop	
21		1	• Set Screw, #6-32	
22	4137299	1	Set Screw, #6-32 x 3/16" Cup	
23	400218	2	Screw, 5/16-24 x 1/2" Hex Head	
24	400108	4	Screw, 1/4-20 x 3/4" Hex Head	
25	444708	4	Locknut, 1/4-20 Center	
26	2811846	1	Engine Base	Includes Decals
27	4148539	1	Cover, Clutch	Includes Decal
28	REF	1	Cable, Bail Throttle	See 2.1
29	REF	1	Cable, Paddle Throttle	See 2.1
30	453009	2	Flat Washer, 5/16	
31	4147695	1	Throttle Cover	Includes Decal
32	348849	AR	Shim, 0.01"	

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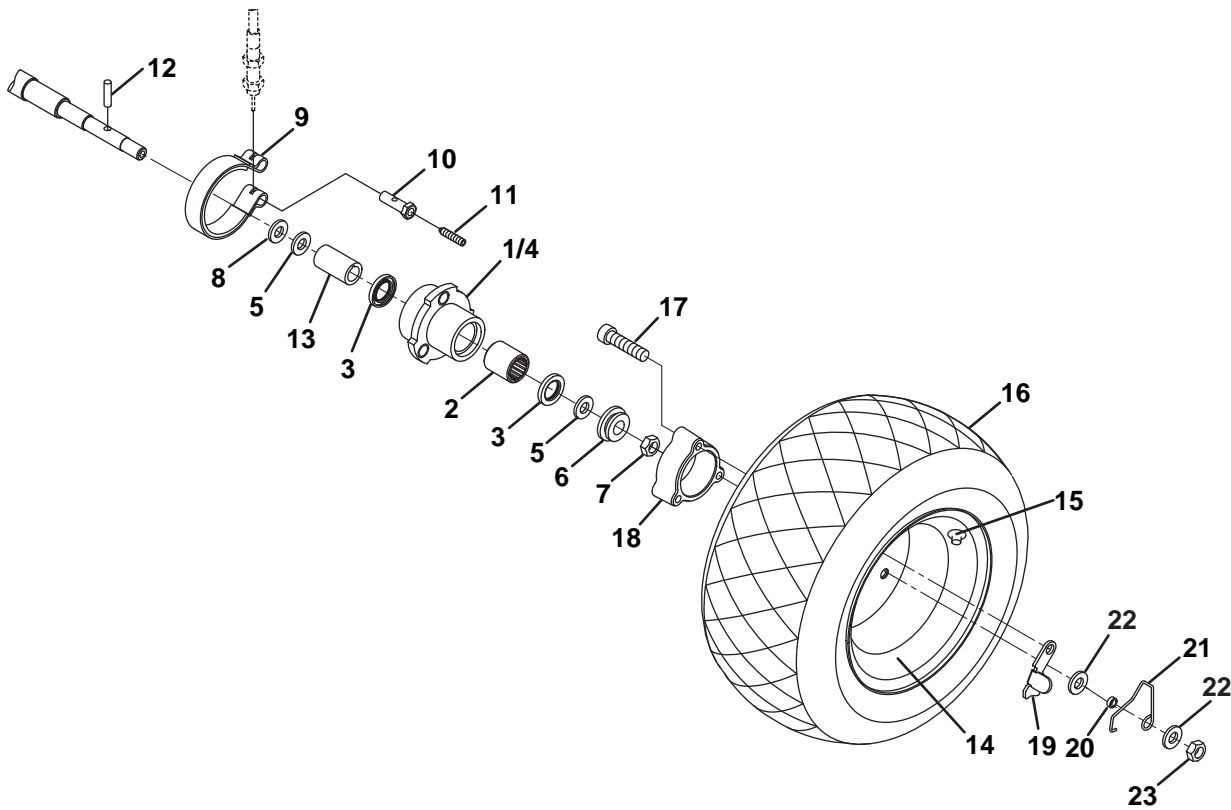
8.1 Traction Rollers



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	3004026	1	Shaft, Roller	
2	163801	2	Gear, Differential	
3	325656	2	• Bushing	
4	344745	2	Washer, Thrust	
5	202947	2	Pinion	
6	308030	2	Washer, Pinion Thrust	
7	103862	2	Housing, Differential	
8	308033	2	• Bushing	
9	400059	6	Screw, #10-24 x 5/8" Hex Socket	
10	444782	6	Locknut, #10-24 Center	
11	338394	2	Hub, Roller	
12	471214	2	Fitting, Grease	
13	400190	6	Screw, 5/16-18 x 1-1/4" Hex Head	
14	446136	6	Lockwasher, 5/16 Heavy	
15	163523	2	Roller, Traction	
16	471222	2	• Fitting, Grease	
17	304569	2	• Bushing	
18	366648	2	• Seal, Grease	
19	364171	8	Bolt, Special	
20	308028	1	Shaft, Pinion	
21	365307	1	Hub	

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9.1 Transport Wheels



Item	Part No.	Qty.	Description	Serial Numbers/Notes
1	1000477	1	Hub, L.H. Wheel	(Includes 2 and 3)
2	338766	1	• Bearing	
3	366705	2	• Seal	
4	1000476	1	Hub, R.H. Wheel	
5	366697	4	Bushing	
6	366718	1	Collar, Latching	
7	445801	1	Nut, 5/8-18 Hex Jam Lock	
8	361451	1	Washer	
9	164056	2	Band, Brake	
10	366742	2	Pin, Brake Band	
11	415513	2	Screw, 1/4-20 x 1/2" Socket Set	
12	461389	2	Pin, 7/32 x 1-1/4" Roll	
13	3004621	2	Sleeve, Clutch	
	62293	1	Pneumatic Transport Tires	Optional Kit
14	4256478	2	• Rim, 5 x 3	
15	360111	2	• Valve	
16	4256477	2	• Tire, 11 x 4 - 5	
17	434049	6	• Screw, 5/16-18 x 2" Socket Head	
18	271920	2	• Spacer, Wheel	
19	366719	2	• Latch	
20	366716	6	• Spacer	
21	366704	2	• Spring	
22	453009	12	• Flat Washer, 5/16	
23	444718	6	• Locknut, 5/16-18 Center	

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