



Unit shown with Seed Box Lid, sold separately

BILLY GOAT SELF PROPELLED OVERSEEDER

OS900SPS, OS900SPH

Owner's Manual

Accessories

| | |
|---|---|
| Seed Box Lid Kit A convenient way to enclose the seed box | Chariot Kit Allows the user to ride behind the unit and decrease fatigue from walking |
| P/N 351600 | P/N 351601 |

Replacement Parts

| | |
|---|---|
| Reel Kit Use to replace worn or damaged reels | Blade Kit Use to replace worn or damaged blades on the reel |
| P/N 351603 | P/N 351610 |



CONTENTS

| | |
|------------------------------------|-------|
| SPECIFICATIONS AND SOUND/VIBRATION | 3 |
| INSTRUCTION LABELS | 4 |
| PACKING CHECKLIST & ASSEMBLY | 5 |
| OPERATION | 6-7 |
| MAINTENANCE | 8 |
| TROUBLESHOOTING | 9 |
| PARTS LIST | 10-21 |



Specifications

| | OS900SPS | OS900SPH |
|--|--------------------------------|--------------------------------|
| Engine: HP' | 9.0 HP (6.7kW) | 9.0 HP (6.7kW) |
| Engine: Model | EX270D50021 | GX270K1QA2 |
| Engine: Type | Subaru | Honda |
| Engine: Fuel Capacity | 6.4 qt. (6.1 L) | 5.6 qt. (5.3 L) |
| Engine: Oil Capacity | 1.06 qt. (1 L) | 1.16 qt. (1.1 L) |
| Total Unit Weight: | 314# (142 kg) | 323# (147 kg) |
| Max. operating slope | 15° | 20° |
| Sound test in accordance with 2000/14/EC | 104 dB(a) | 104 dB(a) |
| Sound at operators ear | 84 dB(a) | 84 dB(a) |
| Vibration at operator position | 0.81g (7.95 m/s ²) | 0.81g (7.95 m/s ²) |

SOUND



L_{wA}
104

SOUND LEVEL 84 dB(a) at Operators Position

Sound tests were conducted in accordance with 2000/14/EC, and were performed on 10-13-2010 under the conditions listed below.

Sound power level listed is the highest value for any model covered in this manual. Please refer to serial plate on the unit for the sound power level for your model.

| | |
|----------------------|---------------------|
| General Conditions: | Sunny |
| Temperature: | 73°F (23°C) |
| Wind Speed: | 11 mph (17 kmh) |
| Wind Direction: | South West |
| Humidity: | 27% |
| Barometric Pressure: | 30.34Hg (770 mm Hg) |

VIBRATION DATA

VIBRATION LEVEL .81g (7.95m/s²)

Vibration levels at the operator's handles were measured in the vertical, lateral and longitudinal directions using calibrated vibration test equipment. Tests were performed on 10-13-2010 under the conditions listed below.

| | |
|----------------------|-------------------|
| General Conditions: | Sunny |
| Temperature: | 66°F (19°C) |
| Wind Speed: | 3 mph (4.8kph) |
| Wind Direction: | East |
| Humidity: | 30.2% |
| Barometric Pressure: | 29.9Hg (101.3kpa) |



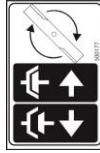
OS900SP Owner's Manual

INSTRUCTION LABELS

The labels shown below were installed on your BILLY GOAT® Overseeder. If any labels are damaged or missing, replace them before operating this equipment. Item numbers from the Illustrated Parts List and part numbers are provided for convenience in ordering replacement labels. The correct position for each label may be determined by referring to the Figure and Item numbers shown.



LABEL DANGER KEEP HANDS AND FEET AWAY
ITEM #145 P/N 400424



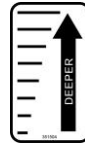
LABEL CLUTCH ITEM #142
P/N 500177



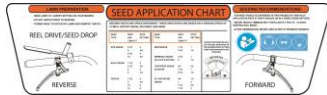
LABEL TRANS. RELEASE
ITEM #146 P/N 351507



LABEL CAUTION GUARDS
ITEM #133 P/N 900327



LABEL DEPTH GAUGE
ITEM #59 P/N 351504



LABEL INSTRUCTIONS SEEDER BOX
ITEM #56 P/N 351501
(page 12)



LABEL SEED METERING
ITEM #66 P/N 351503
(page 12)

ENGINE LABELS

SUBARU

| | | | |
|--|--|--|-------------------------------|
| | Read the owner's manual. | | |
| | Stay clear of the hot surface. | | |
| | Exhaust gas is poisonous. Do not operate in an unventilated area. | | |
| | Stop the engine before refueling. | | |
| | Fire, open flame and smoking prohibited. | | |
| | On (Run) | | Plus: Positive polarity |
| | Off (Stop) | | Battery |
| | Engine oil | | Engine start (Electric start) |
| | Add oil | | |



HONDA



■ READ OWNER'S MANUAL BEFORE OPERATION
■ LIRE LE MANUEL UTILISATEUR AVANT USAGE
■ VOR INBETRIEBNAHME UNBEDINGT BETRIEBUNGSANLEITUNG
■ NO UTILIZAR SINANTES NO HABER MANUA
HONDA MOTOR CO., LTD. MADE IN JAPAN

OIL ALERT
■ WHEN OIL LEVEL LOW,
ENGINE STOPS IMMEDIATELY.



PACKING CHECKLIST

Your Billy Goat Overseeder is shipped from the factory in one carton, completely assembled.



READ all safety instructions before assembling unit.

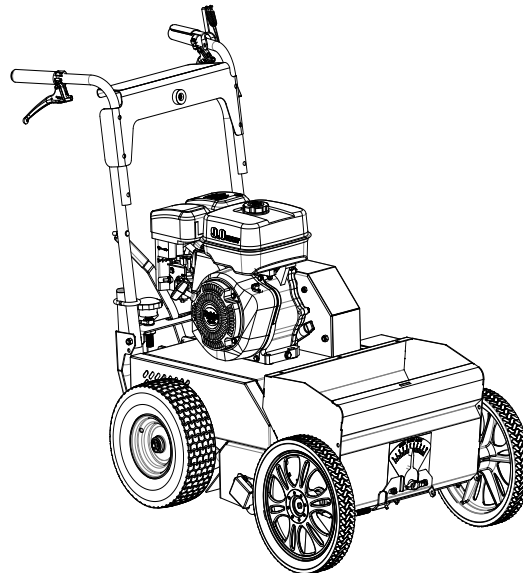
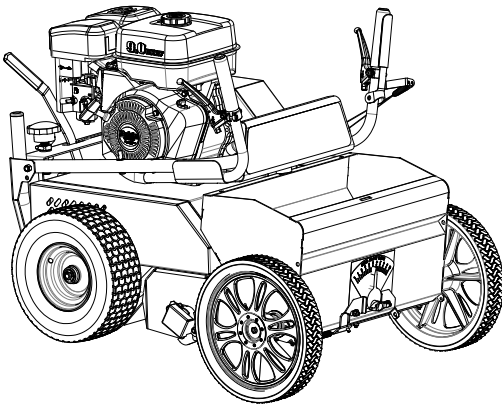
TAKE CAUTION when removing the unit from the box the Handle Assembly is attached to the unit and cables could snag.



PUT OIL IN ENGINE BEFORE STARTING

PARTS BAG & LITERATURE ASSY

Warranty card P/N- 400972, Owner's Manual P/N-351513, General Safety and Warnings Manual P/N-100295. Declaration of Conformity P/N-351508.



Boxing Parts Checklist

- Subaru 9 HP
- Honda 9 OHV
- Parts bag
P/N-351009

ASSEMBLY

1. **UNFOLD** the upper handle and slide handle lock loops (item 35) into place to secure the upper handle to the lower.
2. **CHECK** engine oil level and fill to proper level with engine manufacturers recommended grade of oil. Move height adjust lever to down position, to level engine during checking. See engine manufacturers' instruction manual.
3. **CONNECT** spark plug wire.



OPERATION

FOLDING HANDLE

This unit is equipped with a folding upper handle for easier storage and transportation. The handle can be folded by sliding the handle lock loops (item 35) up. This releases the upper handle, allowing it to be folded over the unit.

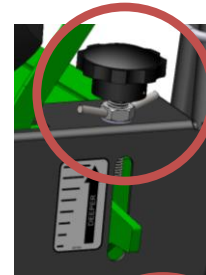
ADJUSTING BLADE DEPTH

The depth of the blades can be raised or lowered by rotating the knob located at the rear of the machine. The relative depth of the blades can be gauged by using the depth scale located on the rear of the machine and the bar next to it.

BLADE POSITION & DEPTH CONTROL LEVER

The blades can be raised or lowered into the ground by height adjustment lever at the rear of the unit. The blades will be in their lowered position when the lever is to the left and should be locked in the notch on the right when in transport. The resulting blade depth can be adjusted higher or lower.

See ADJUSTING BLADE DEPTH above.



SLICING TIPS

Before beginning, it is best to evaluate the condition of the lawn by cutting one or more core samples from area to be treated. A core can be cut using a piece of pvc, or metal pipe. Hammer the pipe into the ground, remove it, push the core out of the pipe and inspect it to determine the depth of thatch in your yard.

THATCH: Thatch is a dense layer of dead grass, clippings, and roots that builds up over time at the base of the lawn preventing air, water, and fertilizer from reaching the soil. This can cause shallow root development and make a lawn more susceptible to drought and disease. Thatch also provides an ideal environment for insects to hide and multiply. Periodic removal of thatch will keep your lawn in good health.

HEAVY THATCH: Lawns with an excessive amount of thatch will require multiple treatments for effective removal. Trying to remove excessive thatch (greater than 3/4" [19 mm] deep) in one treatment will damage or destroy the living part of the lawn. It is best to remove heavy thatch in seasonal treatments (i.e. spring, and fall).

SLOPES: Rake slopes across not up and down. This is much easier and safer for the operator and is better for the lawn. Raking across will help to reduce runoff during watering and allow the sloped ground to hold more seed, fertilizer, and water. The unit's maximum operating slope is 35% or 19°.

DEPTH: The wide range of depth adjustment on your unit is provided to allow for blade wear. Setting the reel deeper will not produce better, or quicker results. The slicing reel should be set even with the ground for verti-slicing work, and set to a maximum 1/2" depth for overseeding jobs. Setting the reel deeper than this will only result in premature wear on the unit (i.e. failed belt). If you desire to work the ground deeper than the above guidelines allow, it should be done gradually in multiple passes..

VERTICUTTING / OVERSEEDING: Mow the lawn to shorter than the normal cut height before starting (i.e. approximately 2" tall for fescue grass). For the best result, Slice/Overseed in criss-cross pattern (See Fig. 1 and See Fig 2).

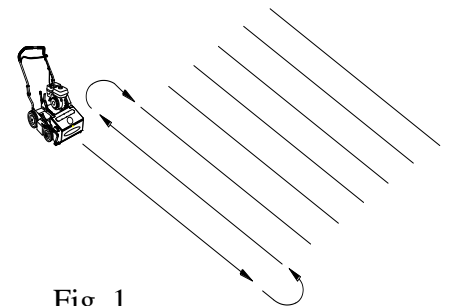


Fig. 1

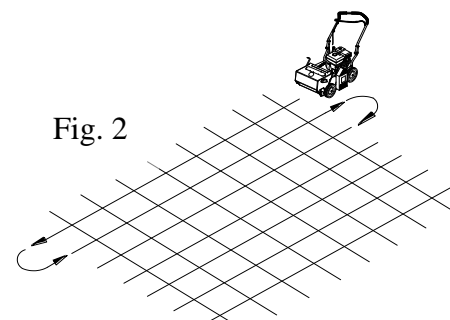


Fig. 2



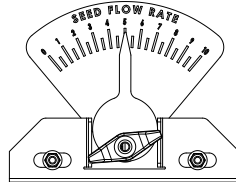
VERTI-CUTTING OPERATION

MOW: Mow the lawn to shorter than the normal cut height (approximately 2" tall)
DRY: Be sure grass is dry. Wet conditions can cause increased damage to healthy grass.
SET DEPTH: With engine off, set the raking depth so that the blades just touch on a flat surface (i.e. driveway, or sidewalk).
START ENGINE: See Safety and General Operations manual.
ENGAGE BLADES: Push the Reel Lever down on the operators handle (upper left side).
NOTE: When engaging the blades in heavy load conditions (i.e. heavy thatch, or very uneven turf), push down on the operators handle lifting the front wheels slightly. Engage the blades. Slowly lower the unit into the turf.
SLICE: Verti-cut a small test area and examine the results. Some thatch and cut stems should be removed and deposited on top of the healthy grass. Grass runners should be cut and ready for removal. If excessive damage occurs to healthy grass, adjust the blade depth to decrease damage. Continue raking the yard, working in one direction (i.e. north-south, or east-west).
NOTE: If a large drop in engine RPM occurs, or bounces during operation the blade depth is set too low.
REMOVE THATCH/STEMS: After verti-cutting, a layer of thatch and cut stems will be deposited over the top of the lawn. We suggest the use of a lawn vacuum or wheeled blower for collection and removal of the thatch/stems.

OVERSEEDING OPERATION

MOW: Mow the lawn to shorter than the normal cut height (approximately 2" tall)
DRY: Be sure grass is dry. Wet conditions can cause increased damage to healthy grass.
SEED: Spread grass seed according to the seed suppliers directions (e.g. 10 lbs. per 1000 ft^2 [4.5 kg. per 93 m^2]) Adjustments to the seed drop is located on the front of the unit on the seed dial and should be used in conjunction with the seed chart on the console.
SET DEPTH: With engine off, set the raking depth so that the blades reach 1/4"-1/2"(6-12 mm) below a flat surface (i.e. driveway, or sidewalk).
START ENGINE: See Safety and General Operations manual.
ENGAGE REEL AND SEED DROP: Push down on the Reel lever on the operators handle. NOTE: When engaging the reel in heavy load conditions (i.e. heavy thatch, or very uneven turf), push down on the operators handle lifting the front wheels slightly. Engage the reel. Slowly lower the unit into the turf.
SLICE: Run machine over the area that has been seeded to incorporate the seed into the soil. If excessive damage occurs to healthy grass, adjust the blade depth to decrease damage. Continue raking the yard, working in one direction (i.e. north-south, or east-west). NOTE: If a large drop in engine RPM occurs, or bounces during operation the blade depth is set too low.
WATER/FERTILIZE: After the seed has been worked into the soil, water and fertilize according to the seed suppliers directions.

ADJUSTING SEED RATE



To set the seed flow rate, loosen the knob on the indicator dial and set it to the corresponding stop setting on the seed application chart (below or on the console) for the type and amount of seed being used.

INSTRUCTION LABEL P/N 351501 containing lawn preparation tips, a seed application chart table, and seeding recommendations.

INSTRUCTION LABEL P/N 351501



MAINTENANCE

PERIODIC MAINTENANCE

Periodic maintenance should be performed at the following intervals:

| Maintenance Operation | Every Use (daily) | Every 25 Hours |
|---|-------------------|----------------|
| Inspect for loose, worn or damaged parts. | | ● |
| Check engine oil | ● | |
| Inspect belts | | ● |
| Engine (See Engine Manual) | | |
| Grease bearings | | ● |
| Inspect and clean engine air filter | ● | |
| Oil height adjustment linkage | | ● |

SLICING BLADE WEAR

1. Wait for engine to cool and disconnect spark plug.
2. Close fuel valve on engine (if available).
3. Lean unit back onto lower handles and secure in place.
4. Inspect blades for wear, and immediately replace any deformed or cracked blades. Measure the overall diameter of the blade.
5. If blades are warped or the diameter of the blade is 6.75"(171 mm) in length they must be replaced. NOTE: We recommend replacing all the blades at once.

JACKSHAFT BELT REPLACEMENT

1. Wait for engine to cool and disconnect spark plug.
2. Place the rear of the unit on blocks.
3. Remove the right rear tire (item 11) and spring (item 155) attaching the housing to the frame.
4. Remove (3) screws (item 114) holding the belt guard (item 19) in place
5. Remove the four screws (item 107) holding the mule drive assembly (item 60) in place.
6. Remove the belt (item 14) by rotating the mule drive pulley and walking it out of the groove, and remove the mule assembly leaving the belt on the transmission.
7. Remove the carriage bolt and nuts holding the right bearing on the jackshaft. Do not remove the bearing and pulley.
8. Remove the belt guard (item 58) by removing the three screws (item 114).
9. Walk the belt off of the crankshaft pulley, and then slide it down the jackshaft to the bearing hole. This will allow the belt to be slid around the mule pulley.
10. Replace the belt by feeding it into the hole and around the pulley that the old one was removed. Make sure it is seated in the jackshaft pulley and then walk it onto the crankshaft pulley making sure it is inside the belt fingers.
11. Reattach the bearing and tighten the hardware securely.
12. Reattach the mule drive and belt, making sure that the belt is seated properly in the transmission pulley and the mule drive assembly.
13. Check the idler tension on the belt when the drive lever is engaged, if it is too loose the spring (item 82) holding the idler arm will need to be replaced.
14. Reattach the guards, tire, spring and spark plug and make sure of proper operation.

MULE BELT REPLACEMENT

1. Wait for engine to cool and disconnect spark plug.
2. Place the rear of the unit on blocks.
3. Remove the right rear tire (item 11) and spring (item 155) attaching the housing to the frame.
4. Remove (3) screws (item 114) holding the belt guard (item 19) in place
5. Remove the four screws (item 107) holding the mule drive assembly (item 60) in place. This will allow access to the belt.
6. Remove the belt (item 14) by rotating the mule drive pulley and walking it out of the groove, and then sliding it off of the transmission. Discard old belt.
7. Install new belt using same procedure to walk the belt into the groove, making sure it is seated fully in all pulleys. Reattach the mule drive assembly.
8. With new belt installed pull the drive levers up and make sure the idler pulley puts tension on the cable. The proper adjustment should have the drive lever fully engaged and the belt should be snug on the pulleys.
9. Re-install the belt guard, spring, tire, and then reattach the spark plug.

REEL BELT REPLACEMENT

1. Wait for engine to cool and disconnect spark plug.
2. Remove (2) screws (item 38) holding the belt guard (item 20) in place
3. Remove the belt (item 17) by rotating the reel pulley (item 16) and walking it out of the groove. Discard old belt.
4. Install new belt using same procedure to walk the belt into the groove, making sure that it is inside the belt fingers.
5. With new belt installed push the reel drive lever down and make sure the idler pulley puts tension on the cable. The proper adjustment should have the blade lever fully engaged and the belt should be snug on the pulleys.
6. Re-install the belt guard and reattach the spark plug.

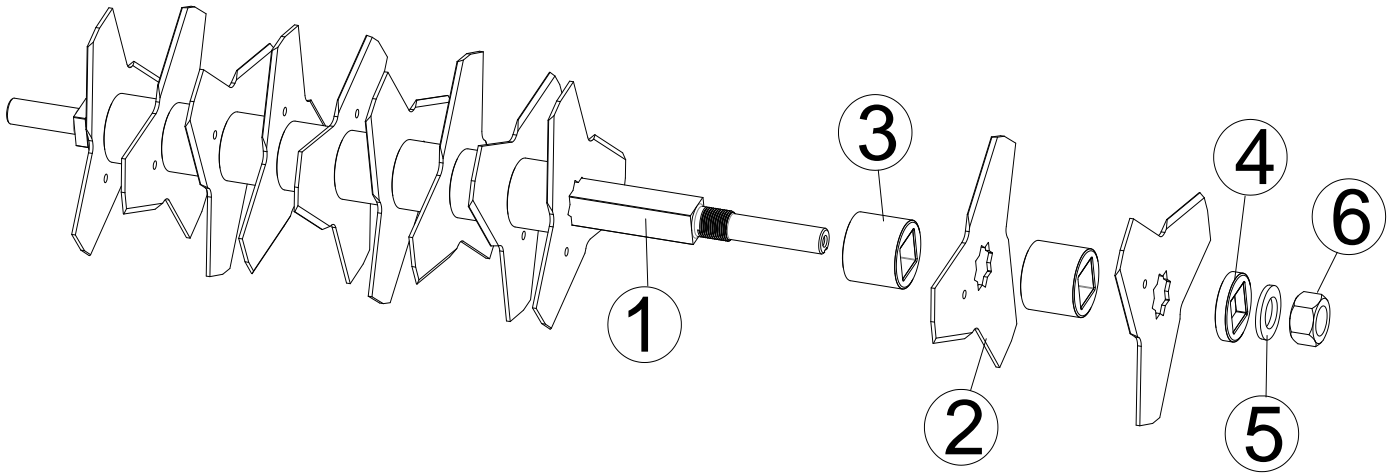


Troubleshooting

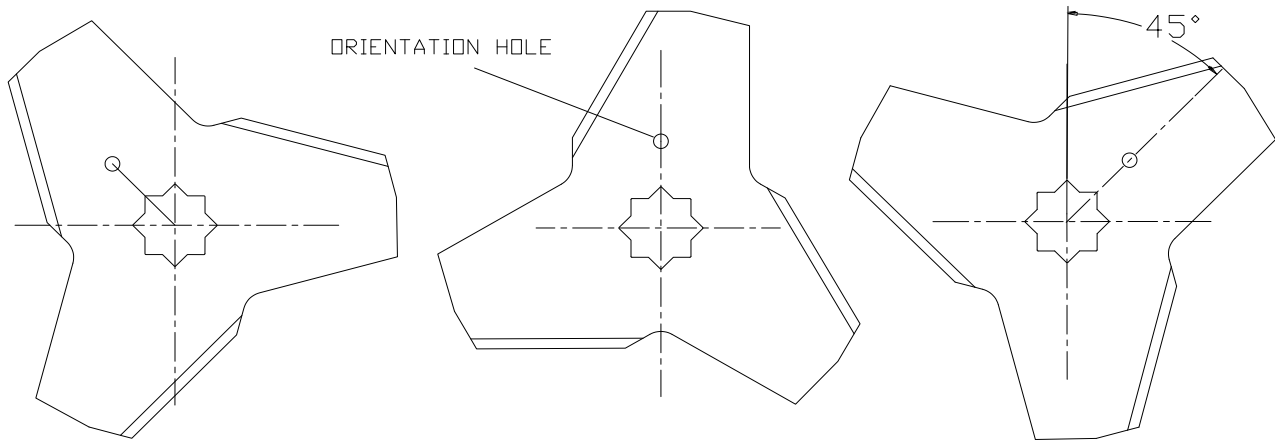
| Problem | Possible Cause | Solution |
|---------------------------------------|--|---|
| Abnormal vibration. | <ul style="list-style-type: none"> · Damaged or missing blades. Loose handle bolts. Loose engine bolts | <ul style="list-style-type: none"> · Stop work immediately. Replace any damaged or missing blades. Tighten all loose nuts and bolts. |
| Engine stalls or labors when raking | <ul style="list-style-type: none"> · Blades set too deep into ground. | <ul style="list-style-type: none"> · Raise blades so that they just touch the ground on a level surface |
| Engine will not start. | <ul style="list-style-type: none"> · Stop switch off (Honda only). Throttle in off position · Out of gasoline or bad, old gasoline. · Spark Plug wire disconnected. · Gas valve off. · Dirty air cleaner. | <ul style="list-style-type: none"> · Check choke position. · Check gasoline. · Connect spark plug wire. · Turn on gas valve. · Clean or replace air cleaner. Contact a qualified service person. |
| Engine is locked, will not pull over. | <ul style="list-style-type: none"> · Debris locked against reel, or drive pulleys. Engine problem. | <ul style="list-style-type: none"> · Pull spark plug wire and remove debris. Contact an engine servicing dealer for engine problems. |

PARTS DRAWING

SLICING REEL ASSY 351603

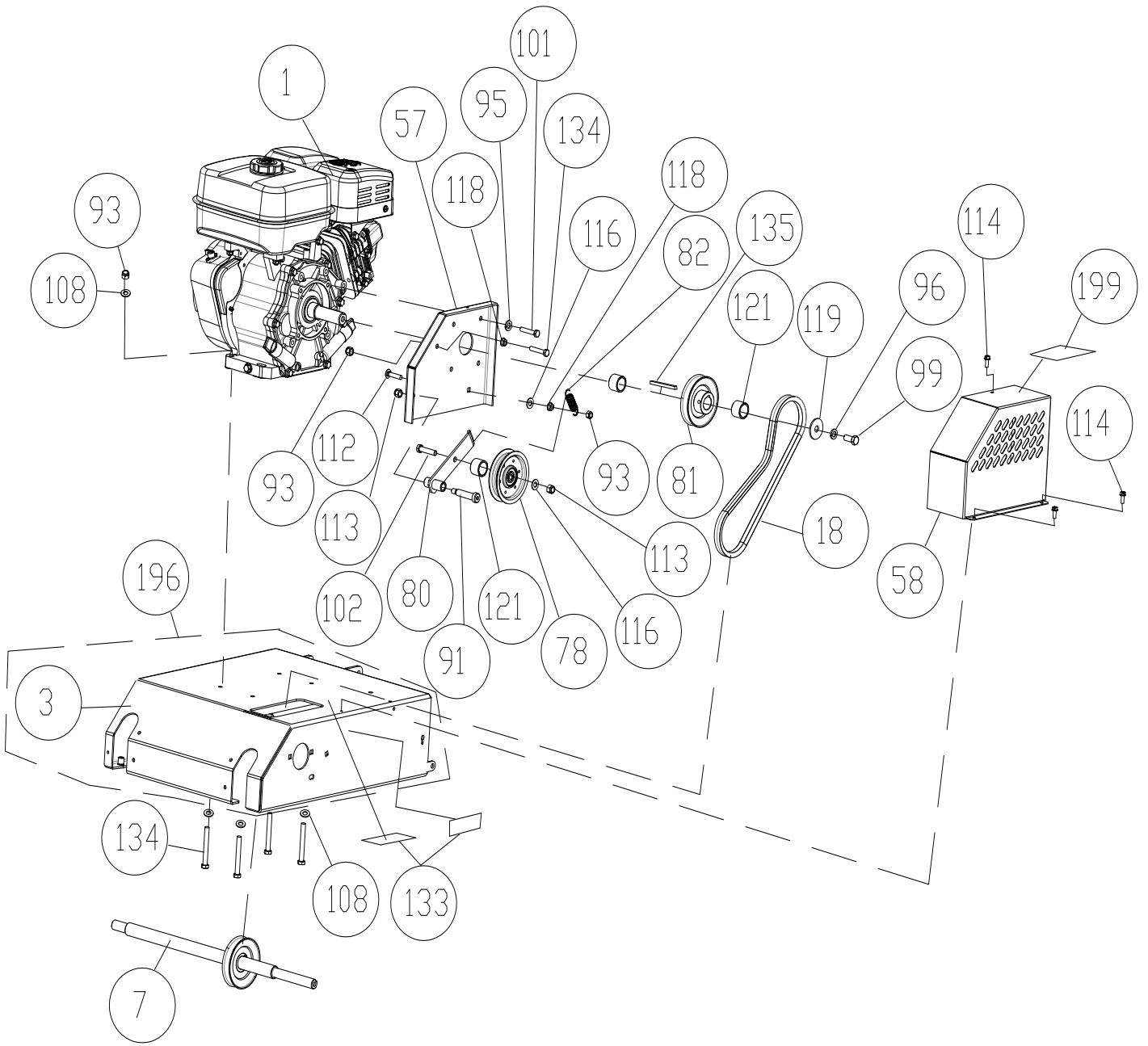


| ITEM NO | DESCRIPTION | PART NO. | QTY |
|---------|---------------------------------|----------|-----|
| 1 | SHAFT VERTICUTTING REEL OS900SP | 351111 | 1 |
| 2 | BLADE VERTICUT OS900SP | 351305 | 11 |
| 3 | SPACER PM REEL OS900SP | 351261 | 10 |
| 4 | SPACER HARDENED REEL OS900SP | 351297 | 1 |
| 5 | SPRING DISC 7/8" ID | 351298 | 1 |
| 6 | NUT 7/8"-14 NC | 350341 | 1 |



EACH BLADE SHOULD BE ROTATED CLOCKWISE 45 DEGREES. USE THE HOLE IN THE BLADE TO SET ORIENTATION

ENGINE ASSEMBLY PARTS DRAWING



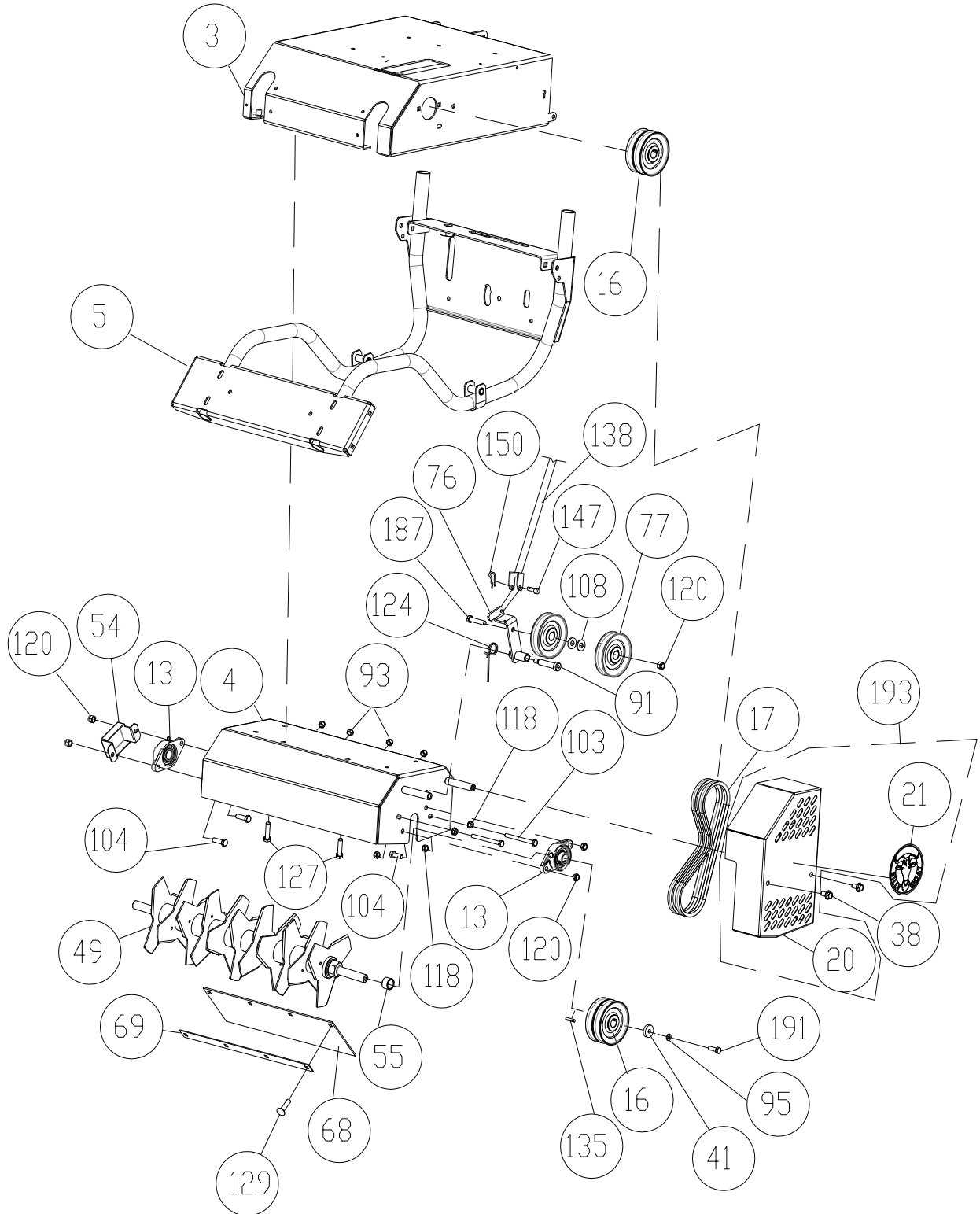


OS900SP Owner's Manual

ENGINE ASSEMBLY PARTS LIST

| ITEM NO. | DESCRIPTION | OS900SPH | | OS900SPS | |
|----------|--|----------|-----|----------|-----|
| | | PART NO. | QTY | PART NO. | QTY |
| 1 | ENGINE HONDA 9HP | 430287 | 1 | - | - |
| | ENGINE SUBARU 9HP | - | - | 351299 | 1 |
| 3 | ENGINE BASE WA | 351100 | 1 | 351100 | 1 |
| 7 | JACKSHAFT WA | 351107 | 1 | 351107 | 1 |
| 18 | BELT GATES #8954-0298 | 351211 | 1 | 351211 | 1 |
| 57 | BRACKET GUARD BELT UPPER | 351203 | 1 | 351203 | 1 |
| 58 | GUARD BELT UPPER OS900SP | 351116 | 1 | 351116 | 1 |
| 78 | PULLEY IDLER 4" OD X 3/8 BORE | 500113 | 1 | 500113 | 1 |
| 80 | ARM IDLER WA UPPER | 351113 | 1 | 351113 | 1 |
| 81 | PULLEY 3.50" OD X 1.00" BORE | 351296 | 1 | 351296 | 1 |
| 82 | SPRING IDLER UPPER | 351275 | 1 | 351275 | 1 |
| 91 | BOLT SHOULDER 1/2" X 2" | 520031 | 1 | 520031 | 1 |
| 93 | NUT LOCK 5/16"-18 | 8160002 | 6 | 8160002 | 6 |
| 95 | WASHER SPLIT LOCK | 8177011 | 4 | 8177011 | 4 |
| 96 | WASHER LOCK 7/16' S/T MED | 8177013 | 1 | 8177013 | 1 |
| 99 | SCREWCAP 7/16"-20 X 1" HCS GR. 8 W/PATCH | 510213 | 1 | 510213 | 1 |
| 101 | SCREWCAP 5/16"-24 X 1" GR 8 W/PATCH | 400164 | 4 | 400164 | 4 |
| 102 | SCREWCAP 3/8"-16 X 1 3/4" HCS ZP | 8041053 | 1 | 8041053 | 1 |
| 108 | WASHER 5/16 FLAT | 8171003 | 8 | 8171003 | 8 |
| 112 | BOLT CARRIAGE 5/16"-18 X 1 1/2" ZP | 8024042 | 1 | 8024042 | 1 |
| 113 | LOCK NUT 3/8-16 | 8160003 | 2 | 8160003 | 2 |
| 114 | SCREW SELF TAP 1/4"-20 X 5/8" HWH TYPE F | 890359 | 3 | 890359 | 3 |
| 116 | WASHER 3/8" SAE | 8172009 | 2 | 8172009 | 2 |
| 118 | NUT FLANGE 5/16-18 ZP | 350346 | 2 | 350346 | 2 |
| 119 | PLATE IMPELLER WASHER PB110 | 850443 | 1 | 850443 | 1 |
| 121 | SPACER 1.25 OD X 1.010 ID X .938 THK | 351413 | 2 | 351413 | 2 |
| 133 | LABEL DANGER | 900327 | 2 | 900327 | 2 |
| 134 | SCREWCAP 5/16"-18 X 1 3/4" HCS ZP | 8041031 | 5 | 8041031 | 5 |
| 135 | KEY SQ 1/4" X 1" | 9201113 | 1 | 9201113 | 1 |
| 196 | ENGINE BASE WA OS900SP W/LABELS | 351608 | 1 | 351608 | 1 |
| 199 | LABEL MADE IN U.S.A. | 520116 | 1 | 520116 | 1 |

REEL/REEL DRIVE ASSEMBLY PARTS DRAWING



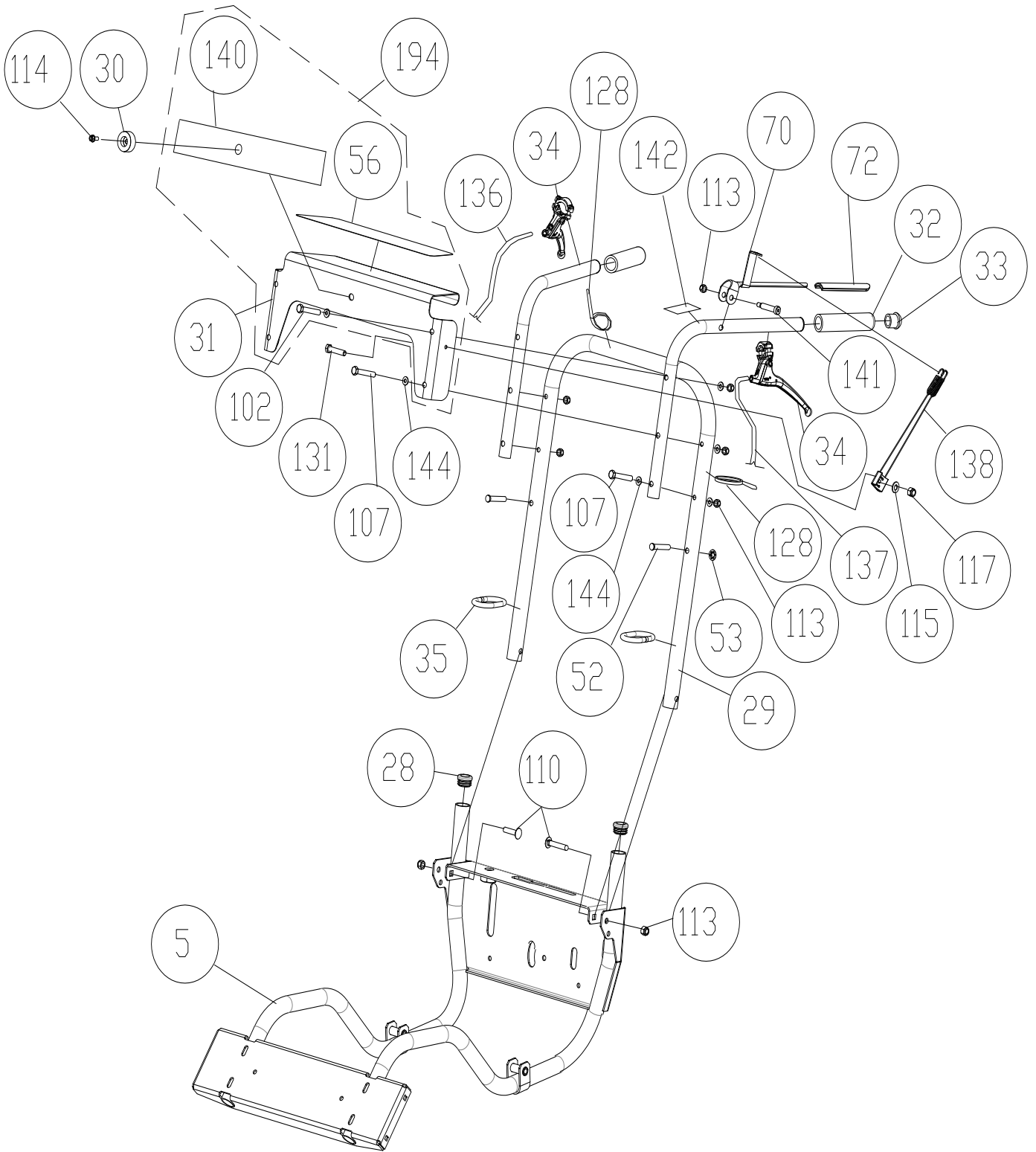


OS900SP Owner's Manual

REEL/REEL DRIVE ASSEMBLY PARTS LIST

| ITEM NO. | DESCRIPTION | OS900SPH | | OS900SPS | |
|----------|---|----------|-----|----------|-----|
| | | PART NO. | QTY | PART NO. | QTY |
| 3 | ENGINE BASE WA | 351100 | 1 | 351100 | 1 |
| 4 | HOUSING VERTICUTTER WA OS900SP | 351101 | 1 | 351101 | 1 |
| 5 | FRAME SUPPORT OS900SP WA | 351102 | 1 | 351102 | 1 |
| 13 | BEARING 3/4" CAST FLANGE W/ZERK | 350209 | 2 | 350209 | 2 |
| 16 | PULLEY 0.75" ID X 4" 4L SECTION | 351210 | 2 | 351210 | 2 |
| 17 | BELT 4L | 351213 | 2 | 351213 | 2 |
| 20 | GUARD REEL BELT OS900SP | 351117 | 1 | 351117 | 1 |
| 21 | LABEL DECAL SM CIRCLE | 890456 | 1 | 890456 | 1 |
| 38 | SER HEX WASHER 3/8" - 16 | 791080 | 2 | 791080 | 2 |
| 41 | WASHER 1.125 OD X .344 ID X 10 GA | 441150 | 1 | 441150 | 1 |
| 49 | REEL ASSY OS900SP | 351012 | 1 | 351012 | 1 |
| 54 | GUARD BEARING REEL OS900SP | 351206 | 1 | 351206 | 1 |
| 55 | SPACER SEED BOX AXLE OS900SP | 351408 | 1 | 351408 | 1 |
| 68 | DEFLECTOR RUBBER OS900SP | 351269 | 1 | 351269 | 1 |
| 69 | BAR CLAMP DEFLECTOR | 351268 | 1 | 351268 | 1 |
| 76 | ARM IDLER WA REEL ENGAGE | 351112 | 1 | 351112 | 1 |
| 77 | PULLEY | 350114 | 2 | 350114 | 2 |
| 91 | BOLT SHOULDER 1/2" X 2" | 520031 | 1 | 520031 | 1 |
| 93 | NUT LOCK 5/16"-18 | 8160002 | 4 | 8160002 | 4 |
| 95 | WASHER SPLIT LOCK | 8177011 | 1 | 8177011 | 1 |
| 103 | SCREWCAP 5/16-18 X 3 1/2" | 8041038 | 2 | 8041038 | 2 |
| 104 | SCREWCAP 3/8"-16 X 1" | 8041050 | 4 | 8041050 | 4 |
| 108 | WASHER 5/16" FC | 8171003 | 2 | 8171003 | 2 |
| 118 | NUT FLANGE 5/16-18 ZP | 350346 | 4 | 350346 | 4 |
| 120 | NUT LOCK 3/8-16 LT WT THIN ZP | 8161042 | 5 | 8161042 | 5 |
| 124 | SPRING IDLER MULE DRIVE | 351295 | 1 | 351295 | 1 |
| 127 | SER HEX WASHER FLNG SCREW 5/16"-18 X 3/4" | 351264 | 6 | 351264 | 6 |
| 129 | BOLT CARRIAGE 5/16"-18 X 3/4" ZP | 8024039 | 4 | 8024039 | 4 |
| 135 | KEY 3/16" SQ X 1 1/4" | 9201080 | 1 | 9201080 | 1 |
| 138 | CABLE CLUTCH SEEDING CONTROL | 351221 | 1 | 351221 | 1 |
| 147 | PIN CLEVIS 1/4" X .50" | 440124 | 1 | 440124 | 1 |
| 150 | PIN CLIP HITCH 0.051" X 3/4" | 440193 | 1 | 440193 | 1 |
| 187 | SCREWCAP 3/8"-16 X 2 1/2" ZP | 8041056 | 1 | 8041056 | 1 |
| 191 | SCREWCAP 5/16"-24 X 1" GR.8 ZP W/PATCH | 400164 | 1 | 400164 | 1 |
| 193 | GUARD REEL BELT OS900SP W/LABELS | 351607 | 1 | 351607 | 1 |

HANDLE ASSEMBLY PARTS DRAWING

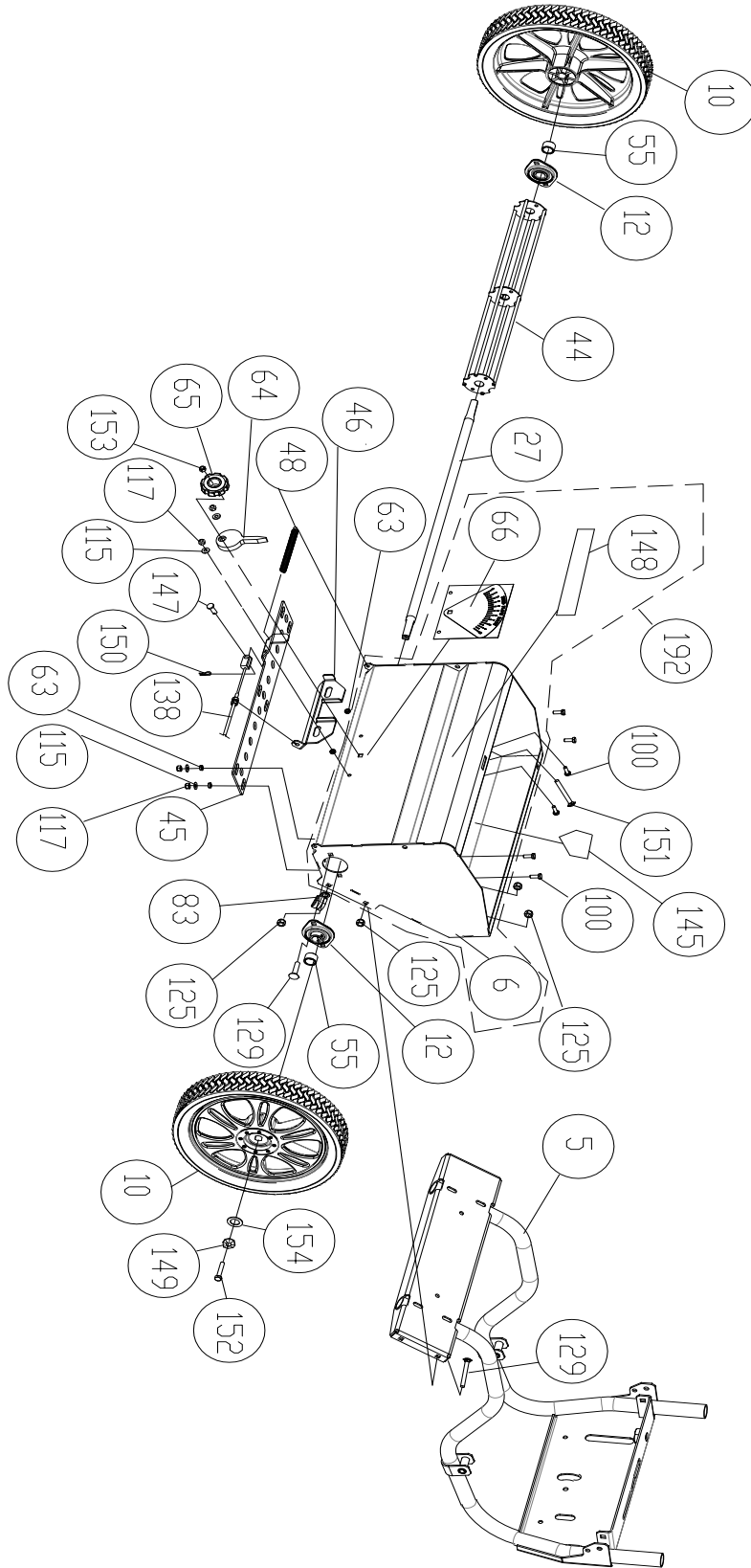




HANDLE ASSEMBLY PARTS LIST

| ITEM NO. | DESCRIPTION | OS900SPH | | OS900SPS | |
|----------|--|----------|-----|----------|-----|
| | | PART NO. | QTY | PART NO. | QTY |
| 5 | FRAME SUPPORT OS900SP WA | 351102 | 1 | 351102 | 1 |
| 28 | PLUG TUBE INSERT 1.25 OD | 791056 | 2 | 791056 | 2 |
| 29 | HANDLE FOLDING OS900SP | 351406 | 1 | 351406 | 1 |
| 30 | BUMPER RECESS | 360298 | 1 | 360298 | 1 |
| 31 | BRACKET CONSOLE OS900SP | 351208 | 1 | 351208 | 1 |
| 32 | GRIP HANDLE | 500267 | 2 | 500267 | 2 |
| 33 | PLUG TUBE INSERT 1" OD | 890132 | 2 | 890132 | 2 |
| 34 | CONTROL MAGURA OS900SP | 351209 | 2 | 351209 | 2 |
| 35 | LOOP FOLDING HANDLE | 351231 | 2 | 351231 | 2 |
| 52 | PIN CLEVIS 3/8 X 2.125 | 520120 | 2 | 520120 | 2 |
| 53 | RETAINER 3/8" BOLT PUSH NUT | 360279 | 2 | 360279 | 2 |
| 56 | LABEL INSTRUCTION OS900SP | 351501 | 1 | 351501 | 1 |
| 70 | LEVER CLUTCH/SEED DROP | 351212 | 1 | 351212 | 1 |
| 72 | GRIP LEVER 0.125" X 1" X 5" ORANGE | 500379 | 1 | 500379 | 1 |
| 102 | SCREWCAP 3/8"-16 X 1 3/4" HCS ZP | 8041053 | 2 | 8041053 | 2 |
| 107 | SCREWCAP 3/8"-16 X 3" HCS ZP | 8041058 | 4 | 8041058 | 4 |
| 110 | BOLT CARRIAGE 3/8"-16 X 2" ZP | 8024062 | 2 | 8024062 | 2 |
| 113 | LOCK NUT 3/8-16 | 8160003 | 9 | 8160003 | 9 |
| 114 | SCREW SELF TAP 1/4"-20 X 5/8" HWH TYPE F | 890359 | 1 | 890359 | 1 |
| 115 | WASHER 1/4" SAE | 8172007 | 1 | 8172007 | 1 |
| 117 | LOCK NUT 1/4-20 | 8160001 | 1 | 8160001 | 1 |
| 128 | TY WRAP | 900407 | 2 | 900407 | 2 |
| 131 | SCREWCAP 1/4"-20 X 1" HCS ZP | 8041006 | 1 | 8041006 | 1 |
| 136 | CABLE SPEED CONTROL RT | 351219 | 1 | 351219 | 1 |
| 137 | CABLE SPEED CONTROL LFT | 351271 | 1 | 351271 | 1 |
| 138 | CABLE CLUTCH SEEDING CONTROL | 351221 | 1 | 351221 | 1 |
| 140 | LABEL LOGO OS900SP | 351500 | 1 | 351500 | 1 |
| 141 | BOLT SHOULDER 3/8" X 1 1/4" | 360284 | 1 | 360284 | 1 |
| 142 | LABEL CLUTCH BLADE | 500177 | 1 | 500177 | 1 |
| 144 | WASHER 3/8 FC | 8171004 | 12 | 8171004 | 12 |
| 194 | BRACKET CONSOLE OS900SP W/LABELS | 351605 | 1 | 351605 | 1 |

SEED BOX ASSEMBLY PARTS DRAWING



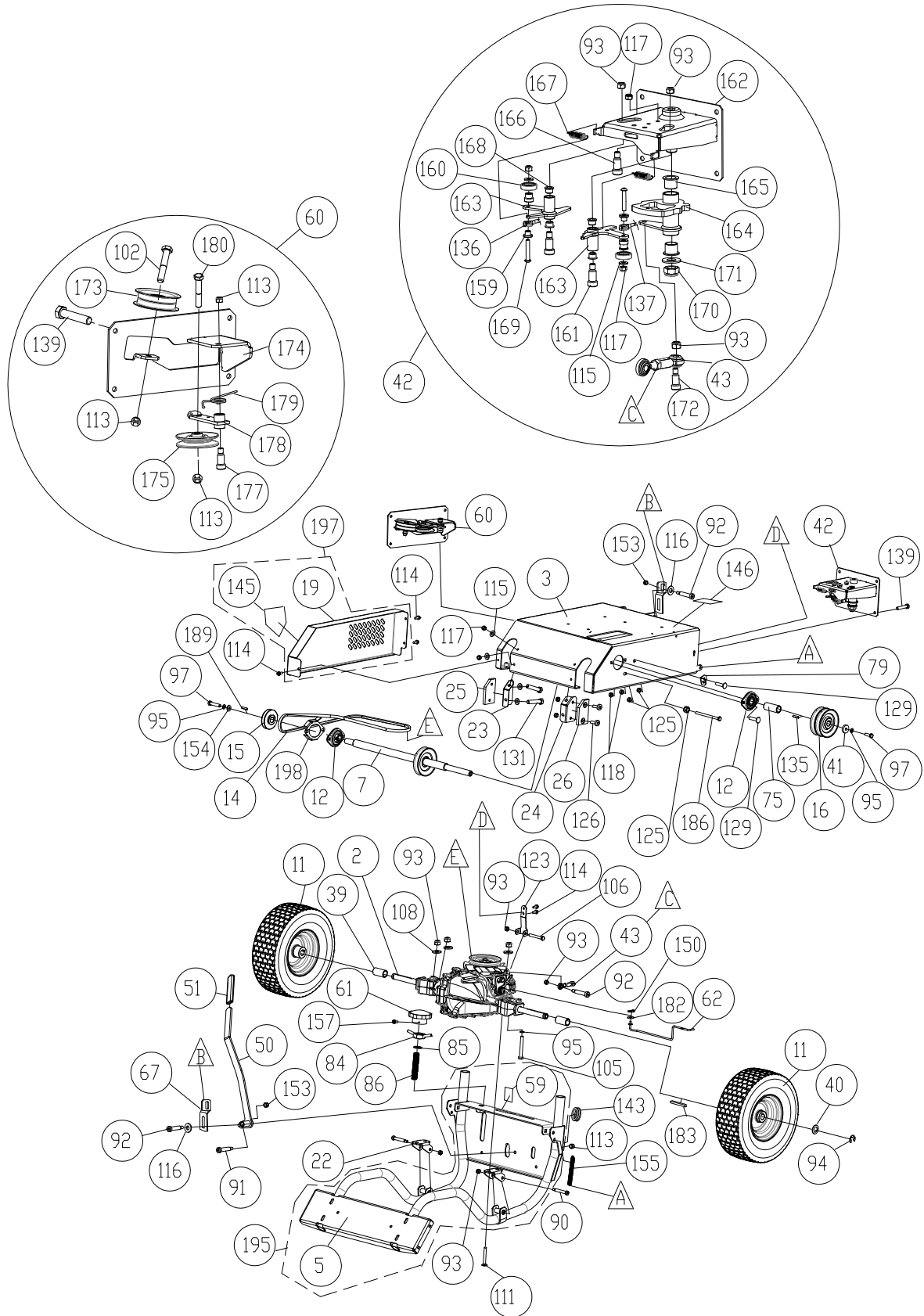


OS900SP Owner's Manual

SEED BOX ASSEMBLY PARTS LIST

| ITEM NO. | DESCRIPTION | OS900SPH | | OS900SPS | |
|----------|------------------------------------|----------|-----|----------|-----|
| | | PART NO. | QTY | PART NO. | QTY |
| 5 | FRAME SUPPORT OS900SP WA | 351102 | 1 | 351102 | 1 |
| 6 | SEED BOX WA | 351103 | 1 | 351103 | 1 |
| 10 | FRONT WHEEL 14" ASSY | 351013 | 2 | 351013 | 2 |
| 12 | BEARING & FLANGETTE ASSY | 850232 | 4 | 850232 | 4 |
| 27 | AXLE SEED BOX | 351223 | 1 | 351223 | 1 |
| 44 | WHEEL PADDLE SEED WA | 351105 | 1 | 351105 | 1 |
| 45 | PLATE SEED CONTROL OS900SP | 351220 | 1 | 351220 | 1 |
| 46 | BRACKET CONTROL SEED RATE | 351222 | 1 | 351222 | 1 |
| 48 | SPRING EXTENSION .5 X 5.00 | 351303 | 1 | 351303 | 1 |
| 55 | SPACER SEED BOX AXLE OS900SP | 351408 | 2 | 351408 | 2 |
| 63 | SPACER SEED PLATE OS900SP | 351253 | 8 | 351253 | 8 |
| 64 | DIAL SEED INDICATOR | 351265 | 1 | 351265 | 1 |
| 65 | KNOB 5/16"-18 X 5/8" FLUTED | 400339 | 1 | 400339 | 1 |
| 66 | LABEL SEED FLOW RATE | 351503 | 1 | 351503 | 1 |
| 83 | CLAMP ROUTING FUEL LINE | 791070 | 1 | 791070 | 1 |
| 100 | SCREW 1/4" - 20 X .75 HWH | 8041004 | 8 | 8041004 | 8 |
| 115 | WASHER 1/4" SAE | 8172007 | 8 | 8172007 | 8 |
| 117 | LOCK NUT 1/4-20 | 8160001 | 8 | 8160001 | 8 |
| 125 | NUT 5/16"-18 SER HEX WASHER FLN | 350346 | 8 | 350346 | 8 |
| 129 | BOLT CARRIAGE 5/16"-18 X 3/4" ZP | 8024039 | 8 | 8024039 | 8 |
| 138 | CABLE CLUTCH SEEDING CONTROL | 351221 | 1 | 351221 | 1 |
| 145 | LABEL WARNING OPEI | 400424 | 1 | 400424 | 1 |
| 147 | PIN CLEVIS 1/4" X .61 | 350399 | 1 | 350399 | 1 |
| 148 | LABEL BADGING OS900SP | 351505 | 1 | 351505 | 1 |
| 149 | WASHER LOCK 5/16" TWISTED TOO | 430298 | 2 | 430298 | 2 |
| 150 | PIN CLIP HITCH 0.051 X 3/4" | 440193 | 1 | 440193 | 1 |
| 151 | BOLT CARRIAGE 5/16"-18 X 1 1/4" ZP | 8024041 | 1 | 8024041 | 1 |
| 152 | SCREWCAP 5/16"-18 X 3/4" HCS ZP | 8041026 | 2 | 8041026 | 2 |
| 153 | NUT LOCK 5/16"-18 LT WT TH ZP | 8161041 | 1 | 8161041 | 1 |
| 154 | WASHER FENDER 5/16" | 8172020 | 2 | 8172020 | 2 |
| 192 | SEED BOX WAS OS900SP W/LABELS | 351604 | 1 | 351604 | 1 |

TRANSMISSION ASSEMBLY PARTS DRAWING





OS900SP Owner's Manual

TRANSMISSION ASSEMBLY PARTS LIST

| ITEM NO. | DESCRIPTION | OS900SPH | | OS900SPS | |
|----------|--|----------|-----|----------|-----|
| | | PART NO. | QTY | PART NO. | QTY |
| 2 | TRANSAXLE | 351201 | 1 | 351201 | 1 |
| 3 | ENGINE BASE WA | 351100 | 1 | 351100 | 1 |
| 5 | FRAME SUPPORT OS900SP WA | 351102 | 1 | 351102 | 1 |
| 7 | JACKSHAFT WA | 351107 | 1 | 351107 | 1 |
| 11 | REAR WHEEL13" X 5" PNEU ASSY | 351202 | 2 | 351202 | 2 |
| 12 | BEARING & FLANGETTE ASSY | 850232 | 4 | 850232 | 4 |
| 14 | BELT 3L540 | 351215 | 1 | 351215 | 1 |
| 15 | PULLEY 0.75" ID X 2.75 | 351214 | 1 | 351214 | 1 |
| 16 | PULLEY 0.75" ID X 4" 4L SECTION | 351210 | 1 | 351210 | 1 |
| 19 | GUARD DRIVE BELT OS900SP | 351118 | 1 | 351118 | 1 |
| 22 | BRACKET FIXED FRONT FRAME | 351226 | 2 | 351226 | 2 |
| 23 | BRACKET RH WEAR PAD OS900SP | 351227 | 1 | 351227 | 1 |
| 24 | BRACKET LH WEAR PAD OS900SP | 351228 | 1 | 351228 | 1 |
| 25 | WEAR PAD RH OS900SP | 351229 | 1 | 351229 | 1 |
| 26 | WEAR PAD LH OS900SP | 351230 | 1 | 351230 | 1 |
| 39 | SPACER REAR WHEEL OS900SP | 351409 | 2 | 351409 | 2 |
| 40 | WASHER .765 ID X 1.25 OD X .06 THK | 850238 | 2 | 850238 | 2 |
| 41 | WASHER 1.125 OD X .344 ID X 10 GA | 441150 | 1 | 441150 | 1 |
| 42 | SPEED CONTROL ASSY | 351011 | 1 | 351011 | 1 |
| 43 | CONNECTOR SPEED CONTROL | 351015 | 1 | 351015 | 1 |
| 50 | LEVER HEIGHT CONTROL WA | 351106 | 1 | 351106 | 1 |
| 51 | GRIP LEVER LIFT | 840191 | 1 | 840191 | 1 |
| 59 | LABEL DEPTH GAUGE OS900SP | 351504 | 1 | 351504 | 1 |
| 61 | KNOB HAND | 850154 | 1 | 850154 | 1 |
| 62 | ROD BYPASS ARM TRANSAXLE | 351304 | 1 | 351304 | 1 |
| 67 | LINK ARM LIFT WA OS900SP | 351416 | 1 | 351406 | 1 |
| 75 | SPACER PULLEY JACKSHAFT | 351415 | 1 | 351415 | 1 |
| 79 | BRACKET CLUTCH CABLE | 351200 | 1 | 351200 | 1 |
| 84 | LOCKNUT WA | 800227 | 1 | 800227 | 1 |
| 85 | WASHER .75" | 800109 | 1 | 800109 | 1 |
| 86 | STUD 3/4"-10 X 3 3/4 PLTD | 351272 | 1 | 351272 | 1 |
| 90 | BOLT SHOULDER 3/8" X 2" | 360153 | 2 | 360153 | 2 |
| 91 | BOLT SHOULDER 1/2" X 2" | 520031 | 1 | 520031 | 1 |
| 92 | BOLT SHOULDER 3/8" X 1/2" | 830528 | 2 | 830528 | 2 |
| 93 | NUT LOCK 5/16"-18 | 8160002 | 10 | 8160002 | 10 |
| 94 | RING RETAINING EXTERNAL 3/4" | 850230 | 2 | 850230 | 2 |
| 95 | WASHER SPLIT LOCK | 8177011 | 6 | 8177011 | 6 |
| 97 | SCREWCAP 5/16-24 X 1" | 400164 | 2 | 400164 | 2 |
| 102 | SCREWCAP 3/8"-16 X 1 3/4" HCS ZP | 8041053 | 1 | 8041053 | 1 |
| 105 | SCREWCAP 5/16"-18 X 3" HCS ZP | 8041036 | 4 | 8041036 | 4 |
| 106 | SCREWCAP 5/16"-18 X 2" | 8041032 | 1 | 8041032 | 1 |
| 108 | WASHER 5/16 FLAT | 8171003 | 4 | 8171003 | 4 |
| 111 | BOLT CARRIAGE 5/16"-18 X 2 3/4" ZP | 8024047 | 4 | 8024047 | 4 |
| 113 | LOCK NUT 3/8-16 | 8160003 | 4 | 8160003 | 4 |
| 114 | SCREW SELF TAP 1/4"-20 X 5/8" HWH TYPE F | 890359 | 5 | 890359 | 5 |
| 115 | WASHER 1/4" SAE | 8172007 | 10 | 8172007 | 10 |
| 116 | WASHER 3/8" SAE | 8172009 | 3 | 8172009 | 3 |
| 117 | LOCK NUT 1/4-20 | 8160001 | 6 | 8160001 | 6 |
| 118 | NUT FLANGE 5/16"-18 ZP | 350346 | 4 | 350346 | 4 |



TRANSMISSION ASSEMBLY PARTS LIST

| ITEM NO. | DESCRIPTION | OS900SPH | | OS900SPS | |
|----------|---|----------|-----|----------|-----|
| | | PART NO. | QTY | PART NO. | QTY |
| 123 | BRACKET TORQUE LIMITING | 351294 | 1 | 351294 | 1 |
| 125 | NUT 5/16"-18 SER HEX WASHER FLNG ZP | 350346 | 7 | 350346 | 7 |
| 126 | SCREW SPOT WELD 5/16"-18 X 3/4 W/PROJ | 351263 | 4 | 351263 | 4 |
| 129 | BOLT CARRIAGE 5/16"-18 X 3/4" ZP | 8024039 | 5 | 8024039 | 5 |
| 131 | SCREWCAP 1/4"-20 X 1" HCS ZP | 8041006 | 4 | 8041006 | 4 |
| 135 | KEY 3/16" SQ X 1 1/4" | 9201080 | 1 | 9201080 | 1 |
| 136 | CABLE SPEED CONTROL RT | 351219 | 1 | 351219 | 1 |
| 137 | CABLE SPEED CONTROL LFT | 351271 | 1 | 351271 | 1 |
| 139 | SCREWCAP 5/16" SER HEX WSHR FLNG GR. 5 ZP | 351264 | 8 | 351264 | 8 |
| 143 | GROMMET 1.25" HOLE | 520092 | 1 | 520092 | 1 |
| 145 | LABEL WARNING DANGER | 400424 | 1 | 400424 | 1 |
| 146 | LABEL DRIVE RELEASE OS900SP | 351507 | 1 | 351507 | 1 |
| 150 | PIN CLIP HITCH 0.051 X 3/4" | 440193 | 1 | 440193 | 1 |
| 153 | NUT LOCK 5/16"-18 LT WT TH ZP | 8161041 | 2 | 8161041 | 2 |
| 154 | WASHER FENDER 5/16" | 8172020 | 1 | 8172020 | 1 |
| 155 | SPRING LIFT ASSIST OS900SP | 351254 | 2 | 351254 | 2 |
| 157 | SCREW MACH #10-24 X 2" HWF ZP | 8059143 | 1 | 8059143 | 1 |
| 159 | SPACER EYELET SPEED CONTROL OS900SP | 351256 | 2 | 351256 | 2 |
| 160 | BEARING 1/2" ID X 1.125 OD | 351257 | 2 | 351257 | 2 |
| 161 | BOLT SHOULDER 3/8" X 1 3/4" | 351258 | 2 | 351258 | 2 |
| 162 | BRACKET SPEED CONTROL WA OS900SP | 351108 | 1 | 351108 | 1 |
| 163 | BELLCRANK SPEED CONTROL WA OS900SP | 351109 | 2 | 351109 | 2 |
| 164 | CAM SPEED CONTROL WA | 351110 | 1 | 351110 | 1 |
| 165 | BUSHING PIVOT FRAME AE | 360183 | 2 | 360183 | 2 |
| 166 | BOLT SHOULDER 5/16" X 1 1/2" | 500340 | 1 | 500340 | 1 |
| 167 | SPRING EXTENSION | 800242 | 2 | 800242 | 2 |
| 168 | BUSHING 3/8" ID X 1/2" OD X 3/8" | 840078 | 4 | 840078 | 4 |
| 169 | SCREWCAP 1/4-20 X 1 3/4 SKT BUT HD | 840199 | 2 | 840199 | 2 |
| 170 | NUT LOCK 5/8"-11 LT WT TH ZP | 8161046 | 1 | 8161046 | 1 |
| 171 | WASHER 5/8" SAE | 8172013 | 1 | 8172013 | 1 |
| 172 | SCREWCAP 5/16"-18 X 1" HCS ZP | 8041028 | 2 | 8041028 | 2 |
| 173 | PULLEY IDLER 2.75" OD X 3/8" BORE | 350114 | 1 | 350114 | 1 |
| 174 | BRACKET DRIVE BELT WA OS900SP | 351104 | 1 | 351104 | 1 |
| 175 | PULLEY 3V GROOVE IDLER | 351216 | 1 | 351216 | 1 |
| 177 | BOLT SHOULDER 1/2" X 2" | 520031 | 1 | 520031 | 1 |
| 178 | ARM IDLER MULE DRIVE WA OS900SP | 351120 | 1 | 351120 | 1 |
| 179 | SPRING IDLER MULE DRIVE OS900SP | 351302 | 1 | 351302 | 1 |
| 180 | SCREWCAP 3/8"-16 X 1 1/2" HCS ZP | 8041052 | 1 | 8041052 | 1 |
| 182 | WASHER #10 SAE | 8172005 | 1 | 8172005 | 1 |
| 183 | KEY 3/16" SQ X 2 1/8" | 9201087 | 2 | 9201087 | 2 |
| 186 | SCREWCAP 5/16"-18 X 5" HCS ZP | 8041042 | 1 | 8041042 | 1 |
| 189 | KEY 3/16" SQ X 5/8" | 9201072 | 1 | 9201072 | 1 |
| 195 | FRAME SUPPORT OS900SP WA W/LABELS | 351606 | 1 | 351606 | 1 |
| 197 | DRIVE BELT GUARD WA W/LABELS | 351609 | 1 | 351609 | 1 |
| 198 | BRACKET BELT GUIDE OSSP | 351300 | 1 | 351300 | 1 |