**WORK INSTRUCTIONS – TRACTOR OPERATION**

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| **Hazards** | **Injuries caused by**   * **Workers injuring body parts hooking up implements** * **Tractor roll over, collision or impact** * **Workers slipping, tripping, falling when mounting/dismounting tractor** * **Tractor colliding with field workers in paddocks** * **Tractor colliding with electrical stays in paddocks** * **Hydraulic hoses failing** * **Biological hazards - snakes, leptospirosis.** * **Noise/vibration - tractor** | |
| **PPE** | **YOU MUST USE**   * **Boots** * **Sun protection** * **Sun screen** * **Sleeved Shirt** | **RECOMMENDED**   * **Sunglasses** * **Gloves** |
| ***Tractors are involved in injury or death of more people than any other piece of farm equipment. Injuries involving tractors usually occur from rollover, run-over, various falling objects and people being pulled into unguarded power take-offs.***  ***Run-overs are primarily linked to these practices:***   * ***starting a tractor from the ground;*** * ***carrying passengers on tractors (usually children); and*** * ***attempting to get on or off a moving tractor*** | | |

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| ***FAMILIARISATION*** | |
| ***Supervisor/trainer to Explain the Function of Each of the Following*** | |
| ***Main Parts***   * Engine * Tyres * Seat and seat adjustment * Roll over protective structure (ROPS) * Drawbar/trailer coupling * Fuel tank cap * Water separator * Engine oil dipstick * Transmission fluid dipstick * Radiator cap * Grills and screens * Battery * PTO shaft and guard * Steering wheel and steering wheel adjustment | ***Controls***   * Foot throttle * Hand throttle * Clutch pedal * Ignition key * Instrument panel * Stop button * Foot brakes * Hand brake * Gear selector * High low ratio selector * Hydrostatic FWD/REV control * Hydraulic lift control * 4Wheel Drive selector * Differential Lock * PTO control |

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| ***WORK OPERATION*** |
| 1. ***OPERATION***  * ***DANGER, WARNING AND CAUTION LABELS***   Pay special attention to the danger, warning and caution labels on the tractor.   * ***PRE-OPERATION CHECKS***   Carry out pre-operation check   * ***START UP***   Securely fasten seat belt  Adjust seat correctly so all controls are in reach   * Check turning brakes locked   + Park brake on   + Gears in neutral   + Hand throttle to low idle   CHECK AREA AROUND TRACTOR IS CLEAR OF PEOPLE  Start tractor  Check gauges   * ***MOVING OFF***   CHECK CLEAR  Clutch in and select gears  Hand brake off  Release clutch slowly  DO NOT ‘RIDE’ THE CLUTCH – FOOT OFF  Slowly move off   * ***STOPPING***   Slow tractor speed, clutch in  Foot brakes on and stop tractor  Shift the gear selector to neutral or park position  Lower attachments to the ground and/or securely block attachments  Hand brake on  Turn tractor off and remove the keys   1. ***HITCHING IMPLEMENTS***  * ***Drawbar or 3-point linkage attachment***   Reverse on to and line up the hitch points from the tractor seat, then shut off the tractor engine before dismounting to attach the implement  Attach hitch pins and spring clips  Adjust lower 3-point linkage to ensure implement is central and secure  Adjust top link as required   * ***External hydraulic attachments***   Position tractor for hitching  Attached implement to 3-point linkage or drawbar  Check the hydraulic couplings and hydraulic hose ends are free from dirt and dust  Connect hoses to the correct couplings  Check hydraulic lines are in good condition, securely connected and leak free  Test external hydraulic operation   * ***Power Take-Off (PTO) driven implements***   Position tractor for hitching  Lower 3-point linkage  **SHUT OFF TRACTOR ENGINE**  Apply tractor park brake  Hitch tractor to implement  Attach PTO shaft, ensuring uni joints are in the correct phase i.e. the yokes are on the same plane/line up  Test PTO operation |
| ***3. CLEAN UP***   * Wash down tractor and implement * Apply anti rust treatment to tractor and implement (fertilizer tractor/spreader) * Grease and lubricate tractor and implement when required (end of operation/week) * Return tractor and implement to parking area * Disconnect implement if required * Complete STOPPING procedure * Ensure tractor key is stored securely |
| ***SAFETY*** |
| **Never start the tractor or operate levers while standing on the ground**  Do not wear loose clothing  Tie back /restrain long hair  Do not have shoelaces dangling  MP3 Players, earphones or other music devices are prohibited when operating a tractor  ALWAYS mount and dismount tractor from the left-hand side  DO NOT allow passengers to ride on any external parts of the tractor. Passengers are only permitted in the tractor if it is fitted with a passenger seat.  NEVER start tractor engine or operate levers from anywhere other than the seat (unless the tractor is fitted with external controls)  DO NOT operate near ditches, holes, embankments, or other areas that may collapse under the tractors weight  Select gears before driving up or down a hill. Do not change gears while travelling up or down a hill. Use the same gear to drive down a hill as you would to drive up the hill  **REDUCE SPEED** when turning or crossing slopes, and on rough, slippery, or muddy surfaces  **WATCH** where you are driving, especially at row ends, on field roads and around trees  Inform supervisor of any hazards on roads or in paddocks that may cause accidents  **SMOOTHLY** operate tractor– no jerky turns, starts or stops  When tractor is stopped, set park brake securely  DON’T SPEED  When starting off without a load, HIGH 1st gear then a maximum of HIGH 2nd gear or 10km per hour.  When transporting fruit you need to travel at a speed so that the bunches do not move on the trailer. Less than 5km per hour.  On Public Roads: - In accordance with road speed signs  Inform supervisor if there is any problem with the operation of the tractor  Ensure all bystanders are clear when reversing to hitch implements  When hitching an implement you should:   * Only attach implements to the drawbar, three-point linkage or other specified hitch points specifically designed for that purpose. * Never hitch to points forward of, or higher than the drawbar as this could be extremely dangerous and cause overturning. * Ensure that the weight applied to the three-point linkage by lifting jibs or other attached equipment does not exceed the manufacturer’s specifications or adversely affect stability or steering. In addition, seek expert technical advice before fixing counter weights or wheel weights (front or rear) to increase tractor stability.   Use jacks, hoists or blocks to suspend or position equipment.  Do not remove guards from PTO shafts  Match the correct PTO speed to the implement being used  Do not step over a rotating PTO shaft even when it is guarded  **Always respect the farm machinery and vehicles. Put all equipment back at the end of the day and park the vehicle and the designated parking area.** |