

## 3660 Twin-Line® Planters

### Base Machine Description

| Specification / Feature           | Description   | 12R N 30   | 16R N 30   |
|-----------------------------------|---|------------|------------|
| Meter Type                        | ---   | mechanical | mechanical |
| Row Unit Hopper Capacity          | ---   | 1.90 bu.   | 1.90 bu.   |
| Number of Rows                    | ---   | 12         | 16         |
| Row Spacing                       | ---   | 30"        | 30"        |
| Width – Shipping                  | → When transported by truck, the left transport wheel and axle stub assembly are removed to provide narrower shipping width.                                | 8'-6"      | 8'-6"      |
| Width – Transport                 | ---   | 11'-2"     | 11'-2"     |
| Width – Planting                  | ---   | 32'-11"    | 42'-11"    |
| Length – Transport                | ---   | 39'-2"     | 49'-2"     |
| Length – Planting                 | ---   | 23'-9"     | 26'-3"     |
| Height – Transport                | ---   | 11'-11"    | 11'-11"    |
| Weight – Base Machine             | ---   | 15,040 lb. | 18,460 lb. |
| Planter Type                      | pull type; 3-section flex; hydraulic operation  | •          | •          |
| Toolbar                           | two parallel 4" x 7" x ¼" tubes with 3-section flex   | •          | •          |
| Center Section                    | 6-row center section  | •          | •          |
| Center Post                       | 7" x 7" center post with UHMW plastic wear pads   | •          | •          |
| Wings                             | two wings (# of rows)   | 3          | 5          |
| Tongue / Hitch                    | telescoping, hydraulically operated, adjustable height cast iron single clevis hitch  | •          | •          |
| Flexibility                       | 13° of flex up and down at each wing  | •          | •          |
| Tires – Transport                 | four 41" x 11" R22.5", Load Range H, tubeless rib implement   | •          | •          |
| Tires – Wing / Lift               | 7.5" x 20", 8-ply, tubeless rib implement (# per wing)  | 1          | 2          |
| Drive System / Seed Transmissions | seed rate control module with single motor hydraulic drive, required harnesses and speed sensors  | •          | •          |
| Air Clutches                      | air clutch control module with drill shaft mounted, single row air clutches (four sections), electronic-over-air valves and 50 psi maximum mini-regulator   | •          | •          |
| Air Compressor                    | 12 VDC air compressor with integral air tank, mounting components and shields, wiring harnesses to power compressor from tractor battery circuit            | •          | •          |
| Weight Transfer Mechanism         | hydraulically operated weight transfer mechanism for balanced weight transfer across the toolbar and rockshaft lift mechanism for increased hitch clearance | •          | •          |
| Drive / Drill Shafts              | 7/8" hex drive shafts with telescoping U-joints   | •          | •          |

| Specification / Feature           | Description  | 12R N 30            | 16R N 30            |
|-----------------------------------|--|---------------------|---------------------|
| <i>PMM Seed Monitoring</i>        | PMM Seed Monitoring with harness and computerized "smart" seed sensors   | •                   | •                   |
| <i>Hydraulic Lift System</i>      | rockshaft lift mechanism and master / slave rephasing  | 2 master<br>2 slave | 2 master<br>4 slave |
| <i>Parking Jack</i>               | 7,000 lb. side-crank   | •                   | •                   |
| <i>Safety Chain – Standard</i>    | one 40,500 lb. rated ½" chain  | •                   | •                   |
| <i>Transport Lights and Signs</i> | safety / warning lights with ASAE connector; SMV sign  | •                   | •                   |
| <i>Kinze Pull Row Units</i>       | double-disc "V" openers; cast inner and formed steel outer scrapers; welded shank with cast lower disc blade mounting; short hopper support panel with parallel linkage; two load-equalizing depth gauge wheel arms with two wheels and 4" x 16" rubber tires; "V" closing wheel arm with 5-position quick-adjust down force spring handle; drive components and meter clutches for plateless meters | •                   | •                   |

## Tractor Hydraulic Requirements

| Configuration                              | Requirements |        | Description   |
|--|--------------|--------|---|
|  | 3 SCV        | 20 gpm |   |
| <i>Base machine with mechanical meters</i> | 3 SCV        | 20 gpm | #1 SCV: planter lift  |
| <i>Hydraulic seed rate control</i>         |              |        | #2 SCV: markers / fold (with 12v control console)               |
|  |              |        | #3 SCV: hydraulic seed rate control / hydraulic weight transfer |

## 3660 ASD Twin-Line® Planters

### Base Machine Description

| Specification / Feature                  | Description   | 12R N 30   | 16R N 30   |
|--|---|------------|------------|
| <i>Meter Type</i>                        | ---   | mechanical | mechanical |
| <i>Total Hopper Capacity</i>             | ---   | 110 bu.    | 110 bu.    |
| <i>Number of Rows</i>                    | ---   | 12         | 16         |
| <i>Row Spacing</i>                       | ---   | 30"        | 30"        |
| <i>Width – Shipping</i>                  | ---   | 11'-2"     | 11'-2"     |
| <i>Width – Transport</i>                 | ---   | 11'-2"     | 11'-2"     |
| <i>Width – Planting</i>                  | ---   | 32'-11"    | 42'-11"    |
| <i>Length – Transport</i>                | ---   | 39'-2"     | 49'-2"     |
| <i>Length – Planting</i>                 | ---   | 23'-9"     | 26'-3"     |
| <i>Height – Transport</i>                | ---   | 12'-11"    | 12'-11"    |
| <i>Weight – Base Machine</i>             | ---   | 17,120 lb. | 20,020 lb. |
| <i>ASD Fill Height</i>                   | ASD fill height in planting position  | 8'-5"      | 8'-5"      |
| <i>Planter Type</i>                      | pull type; 3-section flex; hydraulic operation  | •          | •          |
| <i>Toolbar</i>                           | two parallel 4" x 7" x ¼" tubes with 3-section flex   | •          | •          |
| <i>Center Section</i>                    | 6-row center section  | •          | •          |
| <i>Center Post</i>                       | 7" x 7" center post with UHMW plastic wear pads   | •          | •          |
| <i>Wings</i>                             | two wings (# of rows)   | 3          | 5          |
| <i>Tongue / Hitch</i>                    | telescoping, hydraulically operated, adjustable height cast iron single clevis hitch  | •          | •          |
| <i>Flexibility</i>                       | 13° of flex up and down at each wing  | •          | •          |
| <i>Tires – Transport</i>                 | four 41" x 11" R22.5", Load Range H, tubeless rib implement   | •          | •          |
| <i>Tires – Wing / Lift</i>               | 7.5" x 20", 8-ply, tubeless rib implement (# per wing)  | 1          | 2          |
| <i>Drive System / Seed Transmissions</i> | seed rate control module with single motor hydraulic drive, required harnesses and speed sensors  | •          | •          |
| <i>Seed Delivery System</i>              | Air seed delivery (ASD) system featuring two centrally mounted 55 bushel seed hoppers, seed manifold, hydraulically operated fan with hoses, row unit mini-hoppers, mounting brackets, required fittings, and large catwalk with ladder | •          | •          |
| <i>Air Clutches</i>                      | air clutch control module with drill shaft mounted, single row air clutches (four sections), electronic-over-air valves and 50 psi maximum mini-regulator   | •          | •          |
| <i>Air Compressor</i>                    | 12 VDC air compressor with integral air tank, mounting components and shields, wiring harnesses to power compressor from tractor battery circuit  | •          | •          |

| Specification / Feature           | Description  | 12R N 30            | 16R N 30            |
|-----------------------------------|--|---------------------|---------------------|
| <i>Weight Transfer Mechanism</i>  | Hydraulically operated weight transfer mechanism for balanced weight transfer across the toolbar   | •                   | •                   |
| <i>Drive / Drill Shafts</i>       | 7/8" hex drive shafts with telescoping U-joints  | •                   | •                   |
| <i>PMM Seed Monitoring</i>        | PMM Seed Monitoring with harness and computerized "smart" seed sensors   | •                   | •                   |
| <i>Hydraulic Lift System</i>      | rockshaft lift mechanism and master / slave rephasing  | 2 master<br>2 slave | 2 master<br>4 slave |
| <i>Parking Jack</i>               | 7,000 lb. side-crank   | •                   | •                   |
| <i>Safety Chain – Standard</i>    | one 40,500 lb. rated 1/2" chain  | •                   | •                   |
| <i>Transport Lights and Signs</i> | safety / warning lights with ASAE connector; SMV sign  | •                   | •                   |
| <i>Kinze Pull Row Units</i>       | double-disc "V" openers; cast inner and formed steel outer scrapers; welded shank with cast lower disc blade mounting; short hopper support panel with parallel linkage; two load-equalizing depth gauge wheel arms with two wheels and 4" x 16" rubber tires; "V" closing wheel arm with 5-position quick-adjust down force spring handle; drive components and meter clutches for plateless meters | •                   | •                   |

## Tractor Hydraulic Requirements

| Configuration   | Requirements |        | Description   |
|---|--------------|--------|---|
|   | SCV          | gpm    |   |
| <i>Base machine with mechanical meters</i><br><i>Air Seed Delivery (ASD) system</i><br><i>Hydraulic seed rate control</i>   | 4 SCV        | 35 gpm | #1 SCV: planter lift  |
|   |              |        | #2 SCV: markers / fold (with 12v control console)               |
|   |              |        | #3 SCV: hydraulic seed rate control / hydraulic weight transfer |
|   |              |        | #4 SCV: air seed delivery system                                |
| <i>Base machine with mechanical meters</i><br><i>Air Seed Delivery (ASD) system</i><br><i>Hydraulic seed rate control</i><br><i>Tractor Mounted PTO Hydraulic Pump</i><br>→ <i>Tractor-mounted PTO hydraulic pump supplies oil flow for ASD hydraulic circuit</i> | 3 SCV        | 25 gpm | #1 SCV: planter lift  |
|   |              |        | #2 SCV: markers / fold (with 12v control console)               |
|   |              |        | #3 SCV: hydraulic seed rate control / hydraulic weight transfer |

## 3660 Twin-Line® Planters

### Base Machine Description

| Specification / Feature           | Description   | 12R N 30   | 16R N 30   |
|-----------------------------------|---|------------|------------|
| Meter Type                        | ---   | EdgeVac®   | EdgeVac®   |
| Row Unit Hopper Capacity          | ---   | 1.75 bu.   | 1.75 bu.   |
| Number of Rows                    | ---   | 12         | 16         |
| Row Spacing                       | ---   | 30"        | 30"        |
| Width – Shipping                  | → When transported by truck, the left transport wheel and axle stub assembly are removed to provide narrower shipping width.  | 8'-6"      | 8'-6"      |
| Width – Transport                 | ---   | 11'-2"     | 11'-2"     |
| Width – Planting                  | ---   | 32'-11"    | 42'-11"    |
| Length – Transport                | ---   | 39'-2"     | 49'-2"     |
| Length – Planting                 | ---   | 23'-9"     | 26'-3"     |
| Height – Transport                | ---   | 11'-11"    | 11'-11"    |
| Weight – Base Machine             | ---   | 15,450 lb. | 18,400 lb. |
| Planter Type                      | pull type; 3-section flex; hydraulic operation  | •          | •          |
| Toolbar                           | two parallel 4" x 7" x ¼" tubes with 3-section flex   | •          | •          |
| Center Section                    | 6-row center section  | •          | •          |
| Center Post                       | 7" x 7" center post with UHMW plastic wear pads.  | •          | •          |
| Wings                             | two wings (# of rows)   | 3          | 5          |
| Tongue / Hitch                    | telescoping, hydraulically operated, adjustable height cast iron single clevis hitch  | •          | •          |
| Flexibility                       | 13° of flex up and down at each wing  | •          | •          |
| Tires – Transport                 | four 41" x 11" R22.5", Load Range H, tubeless rib implement   | •          | •          |
| Tires – Wing / Lift               | 7.5" x 20", 8-ply, tubeless rib implement (# per wing)  | 1          | 2          |
| Drive System / Seed Transmissions | seed rate control module with single motor hydraulic drive, required harnesses and speed sensors  | •          | •          |
| Seed Meters                       | includes EdgeVac® seed meters (one per row less seed discs) with dust/sun shields, meter drive clutches, No. 41 chain   | •          | •          |
| Vacuum System                     | 20" diameter vacuum fan with mounting components, hydraulic motor, hoses, valves and fittings; 4" diameter wire-reinforced vacuum feed hoses; vacuum-formed chamber/distribution manifolds with mounting brackets and hardware; 2" diameter meter vacuum hoses with connectors; and analog and electronic digital (12VDC) vacuum gauges | •          | •          |
| Air Clutches                      | air clutch control module with drill shaft mounted, single row air clutches (four sections), electronic-over-air valves and 50 psi maximum mini-regulator   | •          | •          |

| Specification / Feature           | Description  | 12R N 30            | 16R N 30            |
|-----------------------------------|--|---------------------|---------------------|
| <i>Air Compressor</i>             | 12 VDC air compressor with integral air tank, mounting components and shields, wiring harnesses to power compressor from tractor battery circuit   | •                   | •                   |
| <i>Weight Transfer Mechanism</i>  | hydraulically operated weight transfer mechanism for balanced weight transfer across the toolbar and rockshaft lift mechanism for increased hitch clearance  | •                   | •                   |
| <i>Drive / Drill Shafts</i>       | 7/8" hex drive shafts with telescoping U-joints  | •                   | •                   |
| <i>PMM Seed Monitoring</i>        | PMM seed monitoring with harness and computerized "smart" seed sensors   | •                   | •                   |
| <i>Hydraulic lift System</i>      | rockshaft lift mechanism and master / slave rephasing cylinders  | 2 master<br>2 slave | 2 master<br>4 slave |
| <i>Parking Jack</i>               | 7,000 lb. side-crank   | •                   | •                   |
| <i>Safety Chain – Standard</i>    | one 40,500 lb. rated 1/2" chain  | •                   | •                   |
| <i>Transport Lights and Signs</i> | safety / warning lights with ASAE connector; SMV sign  | •                   | •                   |
| <i>Kinze Pull Row Units</i>       | double-disc "V" openers; cast inner and formed steel outer scrapers; welded shank with cast lower disc blade mounting; short hopper support panel with parallel linkage; two load-equalizing depth gauge wheel arms with two wheels and 4" x 16" rubber tires; "V" closing wheel arm with 5-position quick-adjust down force spring handle; drive components and meter clutches for plateless meters | •                   | •                   |

### Tractor Hydraulic Requirements

| Configuration   | Requirements |        | Description   |
|---|--------------|--------|---|
|   | SCV          | gpm    |   |
| <i>Base Machine with EdgeVac® Meters</i><br><i>Hydraulic Seed Rate Control</i><br>→ External case drain required for EdgeVac® hydraulic circuit.  | 4 SCV        | 40 gpm | #1 SCV: planter lift  |
|   |              |        | #2 SCV: markers / fold (with 12v control console)               |
|   |              |        | #3 SCV: EdgeVac® fan  |
|   |              |        | #4 SCV: hydraulic seed rate control / hydraulic weight transfer |
| <i>Base Machine with EdgeVac® Meters</i><br><i>Hydraulic Seed Rate Control</i><br><i>Tractor Mounted PTO Hydraulic Pump</i><br>→ Tractor-mounted PTO hydraulic pump supplies oil flow for EdgeVac® hydraulic circuit. | 3 SCV        | 25 gpm | #1 SCV: planter lift  |
|   |              |        | #2 SCV: markers / fold (with 12v control console)               |
|   |              |        | #3 SCV: hydraulic seed rate control / hydraulic weight transfer |

## 3660 ASD Twin-Line® Planters

### Base Machine Description

| Specification / Feature                  | Description   | 12R N 30   | 16R N 30   |
|--|---|------------|------------|
| <i>Meter Type</i>                        | ---   | EdgeVac®   | EdgeVac®   |
| <i>Total Hopper Capacity</i>             | ---   | 110 bu.    | 110 bu.    |
| <i>Number of Rows</i>                    | ---   | 12         | 16         |
| <i>Row Spacing</i>                       | ---   | 30"        | 30"        |
| <i>Width – Shipping</i>                  | ---   | 11'-2"     | 11'-2"     |
| <i>Width – Transport</i>                 | ---   | 11'-2"     | 11'-2"     |
| <i>Width – Planting</i>                  | ---   | 32'-11"    | 42'-11"    |
| <i>Length – Transport</i>                | ---   | 39'-2"     | 49'-2"     |
| <i>Length – Planting</i>                 | ---   | 23'-9"     | 26'-3"     |
| <i>Height – Transport</i>                | ---   | 12'-11"    | 12'-11"    |
| <i>Weight – Base Machine</i>             | ---   | 17,450 lb. | 20,400 lb. |
| <i>ASD Fill Height</i>                   | ASD fill height in planting position  | 8'-5"      | 8'-5"      |
| <i>Planter Type</i>                      | pull type; 3-section flex; hydraulic operation; central fill  | •          | •          |
| <i>Toolbar</i>                           | two parallel 4" x 7" x ¼" tubes with 3-section flex   | •          | •          |
| <i>Center Section</i>                    | 6-row center section  | •          | •          |
| <i>Center Post</i>                       | 7" x 7" center post with UHMW plastic wear pads   | •          | •          |
| <i>Wings</i>                             | two wings (# of rows)   | 3          | 5          |
| <i>Tongue / Hitch</i>                    | telescoping, hydraulically operated, adjustable height cast iron single clevis hitch  | •          | •          |
| <i>Flexibility</i>                       | 13° of flex up and down at each wing  | •          | •          |
| <i>Tires – Transport</i>                 | four 41" x 11" R22.5", Load Range H, tubeless rib implement   | •          | •          |
| <i>Tires – Wing / Lift</i>               | 7.5" x 20", 8-ply, tubeless rib implement (# per wing)  | 1          | 2          |
| <i>Drive System / Seed Transmissions</i> | seed rate control module with single motor hydraulic drive, required harnesses and speed sensors  | •          | •          |
| <i>Seed Delivery System</i>              | Air Seed Delivery (ASD) system featuring two centrally mounted 55 bushel seed hoppers, seed manifold, hydraulically operated fan with hoses, row unit mini-hoppers, mounting brackets, required fittings, and large catwalk with ladder   | •          | •          |
| <i>Seed Meters</i>                       | includes EdgeVac® seed meters (one per row less seed discs) with dust/sun shields, meter drive clutches, No. 41 chain   | •          | •          |
| <i>Vacuum System</i>                     | 20" diameter vacuum fan with mounting components, hydraulic motor, hoses, valves and fittings; 4" diameter wire-reinforced vacuum feed hoses; vacuum formed chamber/distribution manifolds with mounting brackets and hardware; 2" diameter meter vacuum hoses with connectors; and analog and electronic digital (12VDC) vacuum gauges | •          | •          |

| Specification / Feature           | Description  | 12R N 30            | 16R N 30            |
|-----------------------------------|--|---------------------|---------------------|
| <i>Air Clutches</i>               | air clutch control module with drill shaft mounted, single row air clutches (four sections), electronic-over-air valves and 50 psi maximum mini-regulator  | •                   | •                   |
| <i>Air Compressor</i>             | 12 VDC air compressor with integral air tank, mounting components and shields, wiring harnesses to power compressor from tractor battery circuit   | •                   | •                   |
| <i>Weight Transfer Mechanism</i>  | hydraulically operated weight transfer mechanism for balanced weight transfer across the toolbar   | •                   | •                   |
| <i>Drive / Drill Shafts</i>       | 7/8" hex drive shafts with telescoping U-joints  | •                   | •                   |
| <i>PMM Seed Monitor</i>           | PMM seed monitor with harness and computerized "smart" seed sensors  | •                   | •                   |
| <i>Hydraulic Lift System</i>      | rockshaft lift mechanism and master / slave rephasing cylinders  | 2 master<br>2 slave | 2 master<br>4 slave |
| <i>Parking Jack</i>               | 7,000 lb. side-crank   | •                   | •                   |
| <i>Safety Chain – Standard</i>    | one 40,500 lb. rated 1/2" chain  | •                   | •                   |
| <i>Transport Lights and Signs</i> | safety / warning lights with ASAE connector; SMV sign  | •                   | •                   |
| <i>Kinze Pull Row Units</i>       | double-disc "V" openers; cast inner and formed steel outer scrapers; welded shank with cast lower disc blade mounting; short hopper support panel with parallel linkage; two load-equalizing depth gauge wheel arms with two wheels and 4" x 16" rubber tires; "V" closing wheel arm with 5-position quick-adjust down force spring handle; drive components and meter clutches for plateless meters | •                   | •                   |

### Tractor Hydraulic Requirements

| Configuration   | Requirements |        | Description   |
|---|--------------|--------|---|
| <i>Base Machine with EdgeVac® Meters</i><br><i>Air Seed Delivery (ASD) System</i><br><i>Hydraulic Seed Rate Control</i><br>→ External case drain required for EdgeVac® hydraulic circuit.   | 5 SCV        | 55 gpm | #1 SCV: planter lift  |
|   |              |        | #2 SCV: markers / fold (with 12v control console)               |
|   |              |        | #3 SCV: EdgeVac® fan  |
|   |              |        | #4 SCV: hydraulic seed rate control / hydraulic weight transfer |
|   |              |        | #5 SCV: air seed delivery system                                |
| <i>Base Machine with EdgeVac® Meters</i><br><i>Air Seed Delivery (ASD) System</i><br><i>Hydraulic Seed Rate Control</i><br><i>Tractor Mounted PTO Hydraulic Pump</i><br>→ Tractor-mounted PTO hydraulic pump supplies oil flow for EdgeVac® hydraulic circuit.          | 4 SCV        | 40 gpm | #1 SCV: planter lift  |
|   |              |        | #2 SCV: markers / fold (with 12v control console)               |
|   |              |        | #3 SCV: hydraulic seed rate control / hydraulic weight transfer |
|   |              |        | #4 SCV: air seed delivery system                                |
| <i>Base Machine with EdgeVac® Meters</i><br><i>Air Seed Delivery (ASD) System</i><br><i>Hydraulic Seed Rate Control</i><br><i>Planter Mounted PTO Hydraulic Pump</i><br>→ Planter-mounted PTO hydraulic pump supplies oil flow for EdgeVac® and ASD hydraulic circuits. | 3 SCV        | 25 gpm | #1 SCV: planter lift  |
|   |              |        | #2 SCV: markers / fold (with 12v control console)               |
|   |              |        | #3 SCV: hydraulic seed rate control / hydraulic weight transfer |