

Matrix Pro 570G and 840G:

- Matrix Pro 570G - 5.7" screen
- Matrix Pro 840G - 8.4" screen,
- Works with up to 8 RealView cameras
- Brighter screen - adjustable w/ night mode
- Zoom capabilities
- TeeJet exclusive: 2 color mapping shows areas skipped
- Exterior boundary shows acreage of field
- Interior boundaries (ponds, washes, woods) removed from total acreage
- Icons easily accessed
- Easy-to-use 3D graphical guidance
- Coverage mapping/data export; import coverage data into Google Earth for realistic area view

Matrix Pro Upgrades:

- Affordable pricing on upgrades
- BoomPilot® automatic boom section control
- FieldPilot® auto steering
- Tilt Gyro for automatic adjustment
- Higher-performance antennas for better gain and sensitivity
- Video Selection Modules for use with more than one RealView camera



MATRIX™ PRO 570G & 840G Kits

Kit Part No.	570G Description	Kit Part No.	840G Description
90-02602*	Kit, Matrix Pro 570G w/ ClearPath, Patch Antenna	90-02625	Kit, Matrix Pro 840G w/ ClearPath, Patch Antenna
90-02554*	Kit, Matrix Pro 570G w/ ClearPath, Patch Antenna, RealView Camera	90-02626	Kit, Matrix Pro 840G w/ ClearPath, Patch Antenna, RealView Camera
90-02603*	Kit, Matrix Pro 570G w/ ClearPath, RXA-30 Antenna	90-02627	Kit, Matrix Pro 840G w/ ClearPath, RXA-30 Antenna
90-02604	Kit, Matrix Pro 570G w/ ClearPath, RXA-30 Antenna, RealView Camera	90-02628	Kit, Matrix Pro 840G w/ ClearPath, RXA-30 Antenna, RealView Camera
99-01037	Extended Warranty for Matrix Pro 570	99-01038	Extended Warranty for Matrix Pro 840

* NCI Stocks

CenterLine 220:

- LED Lightbar guidance plus a graphical display
- High-quality, 5 Hz internal GPS engine with external antenna
- Low initial cost for Straight-line (parallel) and limited Curved guidance
- Return-to-point feature
- Durable, sealed rubber keypad is easy to see and provides good tactile feedback
- Provides RADAR-like speed signal output for use with other control systems that require a ground speed signal

CenterLine 220 Benefits:

- Simple setup gets you up and running in no time
- Integrated look-ahead functionality anticipates vehicle's future position
- Simple, intuitive operation with icon-based setup screens

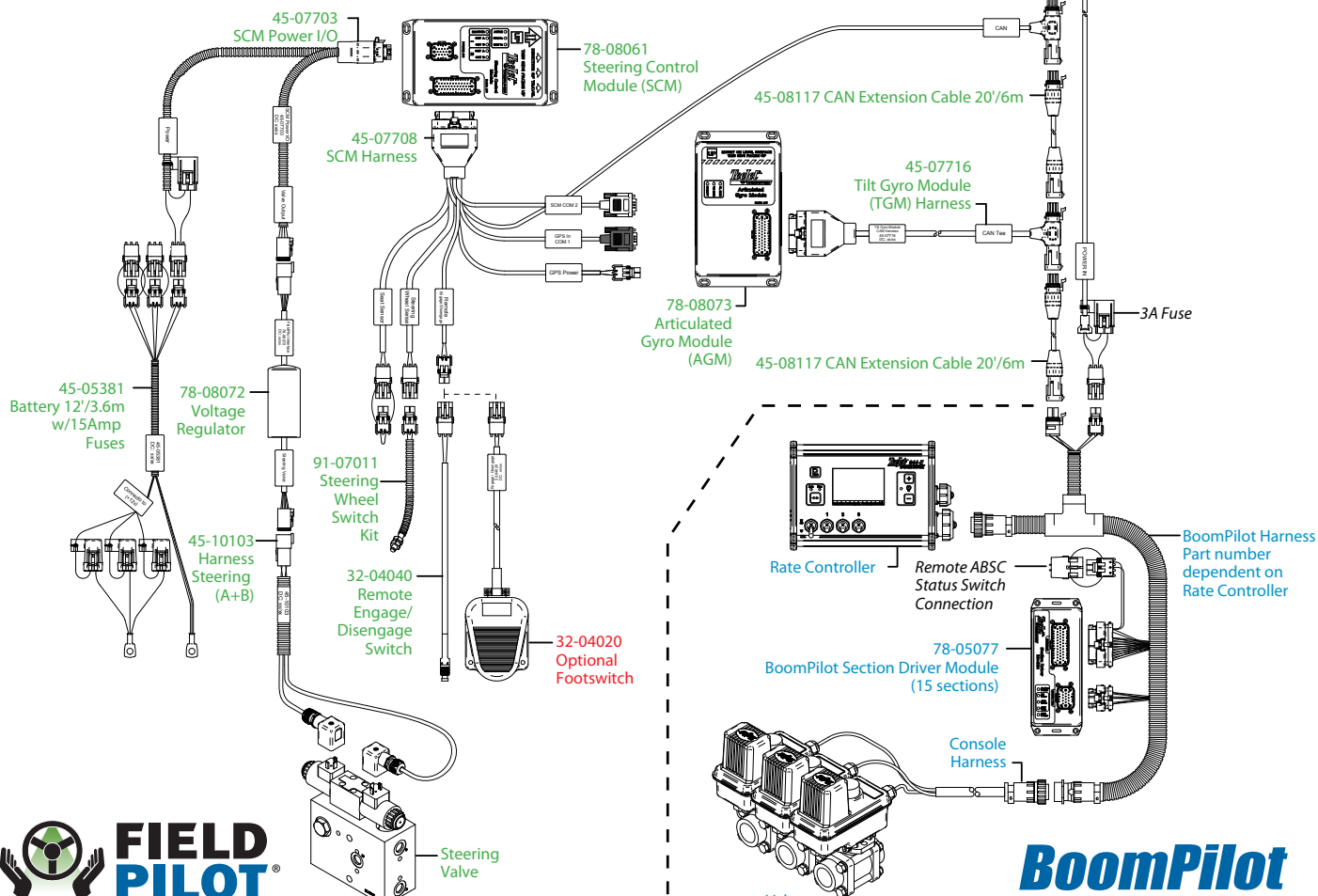
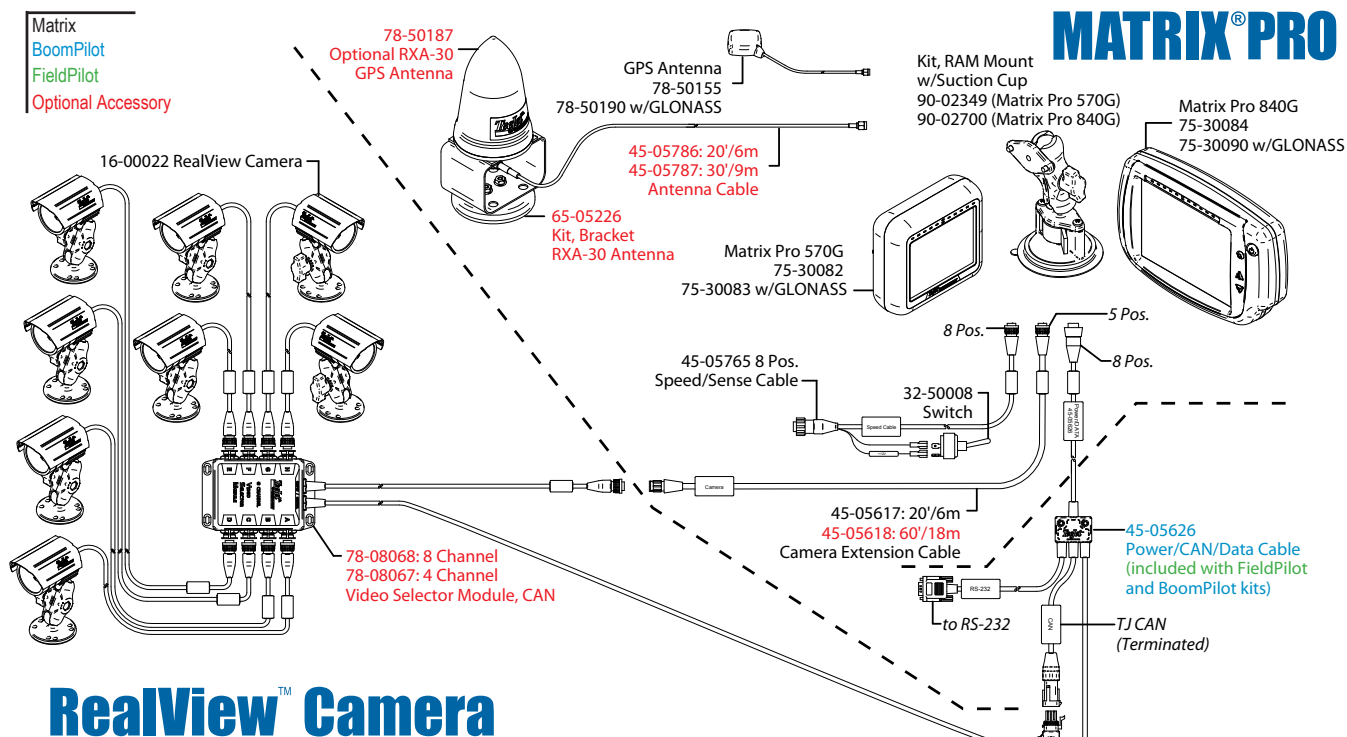


CenterLine 220 Kits

Kit Part No.	Description	Part No.	Description - Consoles, Cables
90-02349	Kit, CenterLine 220, Ram Mount w/Suction Cup	75-30031	Console Centerline 220
90-02399*	Kit, Centerline 220, Assisted Steering	45-05458*	Cable, Centerline 220, Lighter Adapter
90-02472	Kit, Patch Antenna w/ Extension 10 ft	45-05459	Cable, Centerline 220, GPS Stimulator
90-02473	Kit, Patch Antenna w/ Extension 6 ft	45-05471	Cable, Adapter WP to CenterLine 220
78-50155*	Antenna, GPS Patch II with Cable, 13 ft	45-05476	Cable, CenterLine 220, GPS Data Programming Rev 1
90-02720	Kit, RXA-30 Antenna w/ 20 ft Cable	45-05478*	Cable, Centerline 220, Battery Power
90-02721	Kit, RXA-30 Antenna w/ 30 ft Cable	45-05508	Cable, 220 to Raven Console for Speed
65-05179	Metal Mounting Plate (requires Velcro Strips)	45-05559	Cable, Centerline 220, Programming Adapter
60-10081	Velcro Strips	45-20042	Cable, 844 to DJ
99-01015	Extended Warranty, Centerline 220	90-02331	Kit, Tilt Sensor for CenterLine Classic & Swath XL
98-01162	User Guide, Centerline 220, US	90-02705	Kit, Tilt Sensor for Matrix Guidance w/ CAN & Power Cable

* NCI Stocks





Part No.	Description	Part No.	Description
Matrix Pro Accessories		GPS Receivers, Antennas, & Cables	
78-50155*	Antenna, GPS Patch II, 4 Meter	78-50151	Receiver, GPS RX500 Glide for Matrix Pro
78-50186	Antenna, GPS RXA-30, No Cable	78-50148*	Receiver, RX370P for Matrix Pro
45-05617	Cable, Camera Extension, 20 ft	78-50159	Receiver, RX410P w/ Antenna for Matrix Pro
45-05618	Cable, Camera Extension, 60 ft	78-50155*	Antenna, GPS Patch II with Cable, 13 ft, CenterLine 220
45-05615	Cable, Matrix Pro Speed Outlet/Sense, 4 Position	65-05226	Antenna, GPS RXA-30 with Bracket
45-05765	Cable, Matrix Pro Speed/Sense, 8 Position	78-50186	Antenna, GPS RXA-30, No Cable
90-02546	Kit, RealView Camera w/ Mount	45-05630	Cable for A-20 Antenna, 30 ft
90-02349	Kit, RAM Mount w/ Suction Cup, Matrix Pro 570G	45-05676	Cable for GPS Antenna Extension, 25 ft
90-02700	Kit, RAM Mount w/ Suction Cup, Matrix Pro 840G	45-05626	Cable for Power CAN, RS232 Adapter to Conxall 8PG
90-02720	Kit, RXA-30 Antenna w/ 20 ft Cable	45-05619	Cable, A-20 Antenna 20 ft
90-02546	Kit, RealView Camera w/ Mount 20 ft Cable	45-05787	Cable for RXA-30 Antenna, 30 ft
90-02536	Kit, Tilt Gyro Module for Matrix Pro	45-05786	Cable, RXA-30 Antenna 20 ft
90-02565	Kit, Video Selector w/ 4 Cameras, 20 ft Extension	45-05340	Cable for RX370p Data (Port A) and Power
78-50179	Magnetic Mount for Camera	45-05350	Cable for RX370p Data (Ports A & B) and Power
65-05179	Plate, Mounting for Patch Antenna	45-05501	Cable for RX370p GPS Receiver Extension, 25 ft
65-05185	RAM Mount for Camera	90-02738	Kit, GPS Patch Antenna with Mounting Hardware
78-05077	Section Driver Module DM Software	78-50151	Kit, RX500 GPS Receiver, Omnistar XP/HP (no subscription - user sets up with Omnistar)
78-08067	Video Selector Module, 4 Channel Video MUX	78-50159	Kit, RX410p GPS Receiver, WAAS/EGNOS/VBS/Beacon (no subscription - user sets up with Omnistar)
78-08068	Video Selector Module, 8 Channel Video MUX	65-05179	Plate for Mounting Patch Antenna
BoomPilot SDMM/Harness		90-02721	Kit, RXA-30 Antenna with 30 ft Cable
90-02572	Kit, BoomPilot SDM/ Harness Mid-Tech	Speed Sensors	
90-02666	Kit, BoomPilot SDM/ Harness TeeJet	90-02371*	Kit, GPS Speed Sensor for Mid-Tech Control
90-02667	Kit, BoomPilot SDM/ Harness Raven 440-460	90-02386*	Kit, GPS Speed Sensor for TeeJet Controls
90-02668	Kit, BoomPilot SDM/ Harness Raven 4000	90-02404*	Kit, GPS Speed Sensor for Raven Controls
90-02674	Kit, BoomPilot SDM/ Harness 844 Classic US	90-02168	Kit, Radar Compact II, Direct to Mid-Tech Controls
90-02675	Kit, BoomPilot SDM/ Harness Single Section	78-50082	Compact II Radar Only for TeeJet
90-02682	Kit, BoomPilot SDM/ Harness 844E-10	Tilt & Tilt Gyro	
90-02683	Kit, BoomPilot SDM/ Harness Raven 4400 Non OEM	90-02705	Kit, Tilt Sensor for Matrix Guidance System Complete w/ CAN & Power Cable 45-0526
78-05077	BoomPilot Section Driver Module DM Software	90-02332	Kit, Tilt Gyro Module for Matrix w/ FieldPilot, BoomPilot or CL230 Kits
78-05072	BoomPilot Section Driver Module	45-05626	Cable, Power CAN RS232 Adapter to Conxall 8PG
45-05609	Harness, BoomPilot 15 Section Flying Leads	78-08038	Module, Tilt Compensation for Guidance Systems
45-05719	Harness, BoomPilot TeeJet 844	78-08057	Module, Tilt Gyro
45-05742	Harness, BoomPilot 844 Classic, US		
45-05735	Harness, BoomPilot 844E-10		
45-05737	Harness, BoomPilot Raven 4000		
45-05720	Harness, BoomPilot Raven 440		
45-05709	Harness, BoomPilot Raven 440 Non-OEM		
45-05743	Harness, BoomPilot Single Section		
RowPilot Options			
90-02571	Kit, RowPilot includes 78-30010 12 section Switchbox; 45-05634 Harness; 78-05077 BoomPilot Section Driver Module		

* NCI Stocks



Albany - 1-800-624-7931

Sebring - 1-877-605-0273

Griffin 1-800-241-1350

ARC & TASC CONSOLES

ARC & TASC Series Features:

- Large, backlit LCD display shows speed, application rate, total applied, working width, distance covered, field area and total area
- Scan feature monitors and displays all functions
- Error message system signals misapplication and identifies problem source
- Ground Speed Override function can be set to match operating conditions
- All TASC & ARC consoles carry CE certification
- Non-volatile memory retains settings and data when disconnected from power
- Variable Rate-ready consoles can be connected to Mid-Tech printers or Mid-Tech Data Link for variable rate applications
- Upgradable firmware



ARC 6000 Console



TASC 6000 Console

Model	Number of Products	Liquid/Dry	Variable Rate Ready	Injection Ready
ARC 6000	1	Both	No	No
TASC 6100	1	Both	Yes	No
TASC 6200	2	Both	Yes	No
TASC 6300	Carrier + 3 Injection	Liquid	Yes	Yes
TASC 6500	Dual-product + 3 Injection	Both	Yes	Yes
TASC 6600	Carrier + 6 Injection	Liquid	Yes	Yes

ARC & TASC Consoles, Switchboxes, and Options

Part No.	Description	Part No.	Description
90-02154*	ARC 6000 Console Kit, liquid & dry programming	405-0037	Switchbox Solenoid Valves, Master w/ 3 Boom Sections
90-02160	TASC 6000 Console Kit	402-0007	Solenoid Harness for 405-0037, 25'
90-02157	TASC 6300 Console Kit	602-0013	3 Boom Solenoid Harness Extension Cable for 405-0037, 12'
90-02158	TASC 6600 Console Kit	405-0035	Switchbox Solenoid Valves, Master w/ 5 Boom Sections
90-02155	TASC 6500 Console Kit	402-0011	Solenoid Harness for 405-0035, 18'
90-02159	TASC 6200 Console Kit	402-0004	3 Boom Solenoid Harness Extension Cable for 405-0035, 18'
90-02156*	TASC 6100 Console Kit	405-0054	Switchbox Solenoid Valves, Master w/ 9 Boom Sections
Kit includes 18' console power cable, mounting knobs, mounting bracket, manual. Requires power lead.		404-0037	Solenoid Harness for 405-0054, 25'
401-0010*	Console Power Cable, 18'	405-0053*	Switchbox-Motorized Ball Valves, Master w/ 3 Boom Sections
401-0101	Console Power Cable Extension, 20'	405-0034	Switchbox-Motorized Ball Valves, Master w/ 5 Boom Sections
45-05013	Console Power Cable, 35'	405-0065	Switchbox-Motorized Ball Valves, Master w/ 9 Boom Sections
815-0009	ARC/TASC Console Mounting Bracket	402-0023	Motorized Valve Switchbox Cable to Spraying System 344AE, 15'
815-0010	Console Mounting Knob	402-0024	Motorized Valve Switchbox Cable to Spraying System 344AEC, 15'
Data Link Available. Call NCI for details.		402-0071	Motorized Valve Switchbox Cable to Wiring KZ#60, #60B Valves, 15'
405-0036*	5 Boom Section Boom Status Cable	402-0039	Motorized Valve Switchbox Cable, Valve Extension Cable, 3'
405-0038	9 Boom Section Boom Status Cable	402-0024	Motorized Valve Switchbox Cable, Valve Extension Cable, 15'
		402-0028*	Motorized Valve Switchbox Cable, Valve Extension Cable, 25'

* NCI Stocks

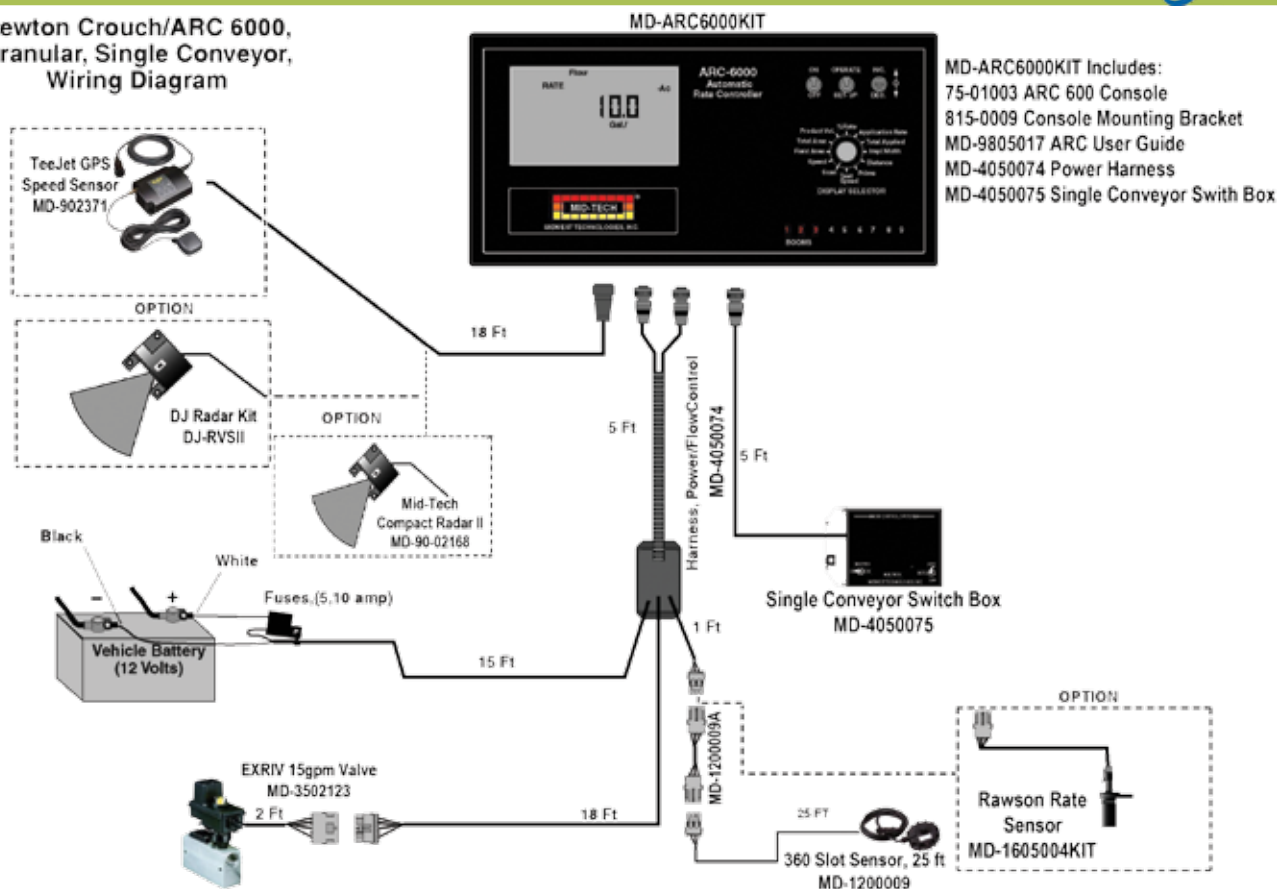


GRANULAR CONTROLLER, SINGLE CONVEYOR

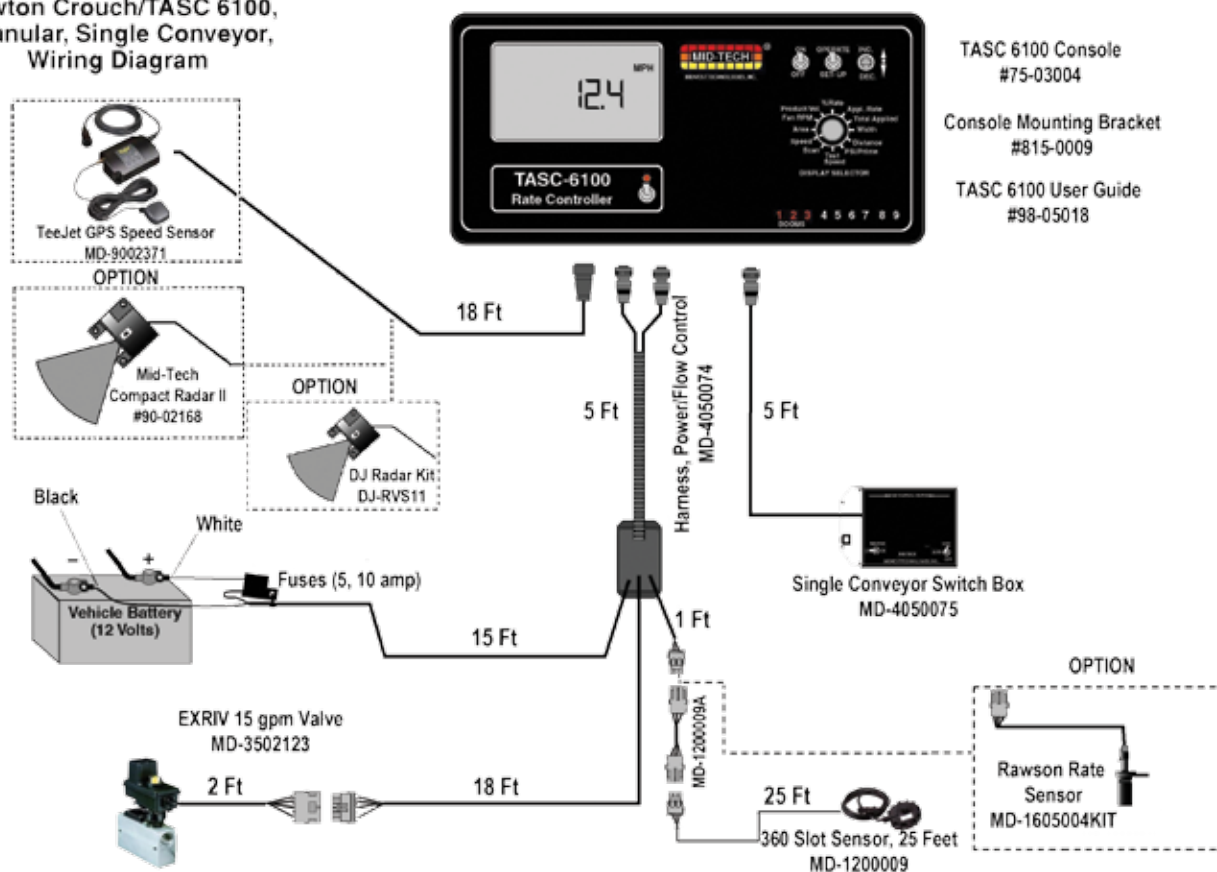
TeeJet®

PRECISION & GUIDANCE

**Newton Crouch/ARC 6000,
Granular, Single Conveyor,
Wiring Diagram**

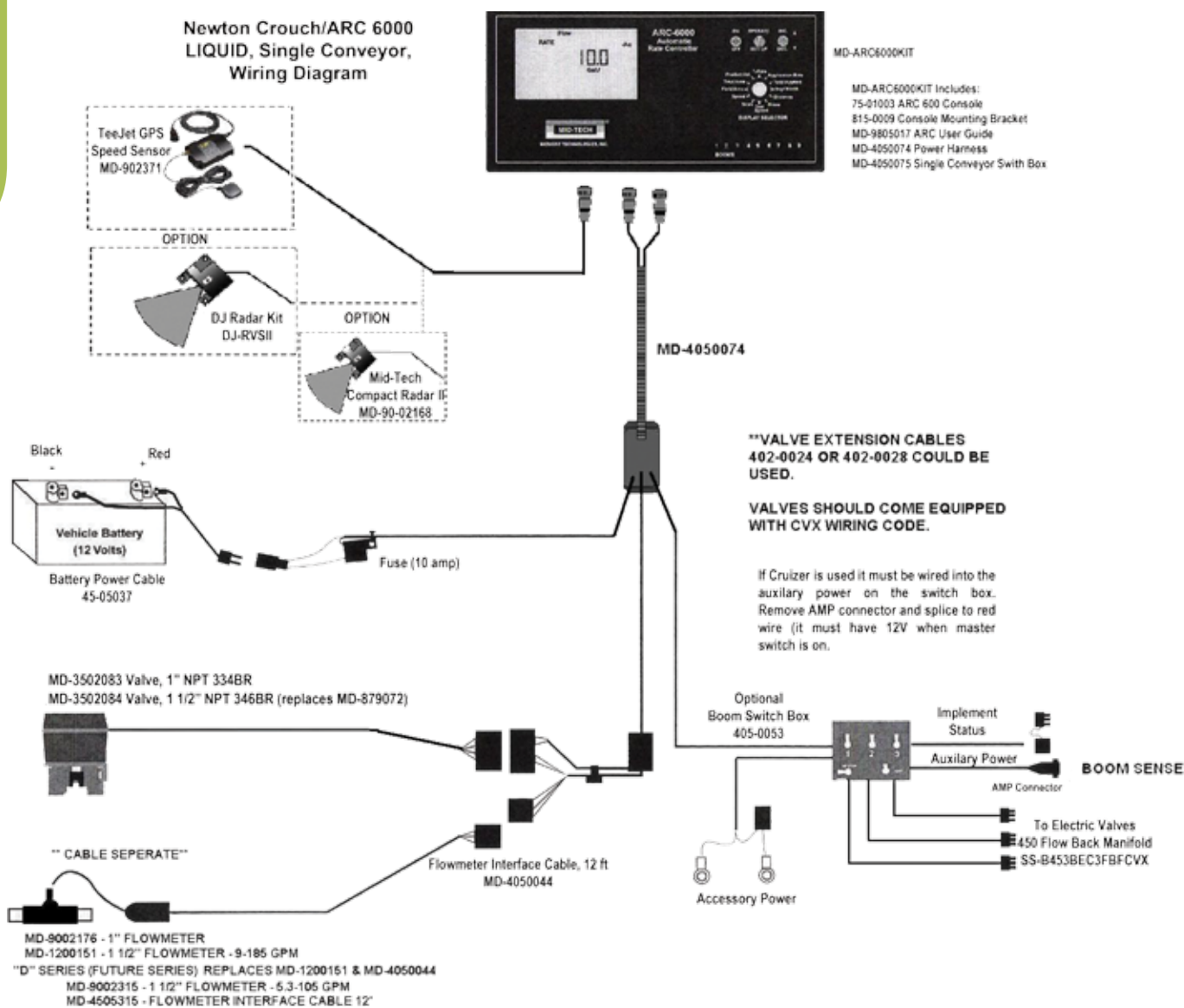


**Newton Crouch/TASC 6100,
Granular, Single Conveyor,
Wiring Diagram**



LIQUID CONTROLLER

Newton Crouch/ARC 6000
LIQUID, Single Conveyor,
Wiring Diagram



	854 Automatic Sprayer Control Features	Part No.	Description
	- Sealed switches & non-volatile memory give dependability; saves up to 10 jobs - Front panel has clear instructions - Auto-Master can be set to automatically switch boom sections on & off at predetermined speeds - Smart Sensing selects between pressure or flow sensors, choosing best sensor for application	90-02108	Kit, 854 Core (Console with mounting brackets, cables, & manual)
		90-02533	Kit, 854 Core, CUX Harness to CVX valve connection
		75-50001	854 Console
		98-05051	User Guide, 854 Sprayer Control
	844-E Automatic Sprayer Control Features	90-50017	Kit, 844-E-5 Core (Console with mounting brackets, cables, & manual)
	- Full-featured sprayer control with ease of use - Large backlit display shows all info at a glance - Single cable connection for quick hookup - Color-coded top selection for easy programming - Flow or pressure based regulation options provide reliability & flexibility 5 boom section switches plus master shutoff - Weather Resistant aluminum housing	90-02501	Kit, 854-E Core, CUX Harness to CVX valve connection
		75-50011	Console, 844-E-5 Console Only
		98-70006	User Guide, 844-E Sprayer Control
	844-AB Automatic Sprayer Control Features	90-50018	Kit, 844-AB-4 Core (Console with mounting brackets, cables, & manual)
	- Exclusive for orchard spraying. Available with conventional wiring system or junction box - Large backlit display shows all info at a glance - Single cable connection for quick hookup - Convenient operation. Individual boom control allows to change spray pattern base on tree height - Individual boom control from tractor seat - On the go swath width adjustment	75-50007	Console, 844-AB-4 Console Only
		98-70007	User Guide, 844-AB Sprayer Control
	834 Automatic Sprayer Control Features	90-50014	Kit, 834-5 Core (Console with mounting brackets, cables, pressure sensor, & manual)
	- Designed for applicators who want precision of computerized rate control without complexity - Simple programming with only 5 valves needed - Operating tips on front panel - Manual mode available	90-50016	Kit, 834-5 Core (Roadway Applications)
		75-50004	Console, 834-5 Console Only
		98-70004	User Guide, 834-P Sprayer Control
	834-P Automatic Sprayer Control Features	90-50225	Kit, 834-P Core (Console with mounting brackets, cables, booster module, pressure sensor 150 psi, proximity sensor & manual)
	- Designed for smaller sprayers with 12-volt electrical product pumps. 834-P simply controls the pump RPM to change application rate - Simple installation, programming, & setup 25-amp capacity for use with larger pumps	75-50048	Console, 834-P Console only
		98-70028	User Guide, 834-P Sprayer Control
144 Valve 244 Valve 344 Valve	744A Manual Sprayer Control Kits	90-50149	Kit: 744A Sprayer Control, Solenoid Harness (3 Switch w/ 100PSI liq gauge)
	- Manual spray controller in a compact package - Lighted pressure gauge for night use - Heavy duty switches with LED indicators **Kits contain special wiring harness to directly connect to 3-section ball valve manifold** - Customer must know GPM of system to select the correct valve	90-50151	Kit: 744A Sprayer Control, Ball Valve Harness (3 Switch w/ 300 PSI liq gauge) Limited PSI Read Not Recommended for PSI Below 60
		90-50161	Kit: 744A Sprayer Control, Solenoid Harness (3 switch w/ 100 PSI liq gauge, one 244 butterfly pressure reg valve)
		90-50163	Kit: 744A Sprayer Control, Solenoid Harness (3 switch w/ 100 PSI liq gauge, one 244 butterfly pressure reg valve, three 144A-3 DirectoValve boom section valves)
		90-50177	Kit: 744A Sprayer Control, Solenoid Harness (3 switch w/ 100PSI liq gauge, one 244 butterfly pressure reg valve, three 144P-3 DirectoValve boom section valves)
		90-50237**	Kit: 744A Sprayer Control, Ball Valve Harness (3 switch w/ 300 PSI liq gauge, one 344-2RL ball pressure reg valve)
		90-50238**	Kit: 744A Sprayer Control, Ball Valve Harness (3 switch w/ 100 PSI gauge, one 344-2RL ball pressure reg valve)



Electric Pressure Regulating Ball Valves for TeeJet Controls

- Designed to produce linear flow regulation and shutoff control in ag applications.
- Two wire lead provides easy installation
- Low power consumption, less than 1 amp

Part No.	Description
35-02090	Valve, 1 1/2" NPT 346 BR Poly Ball 6 Sec, TeeJet Connector
35-02099	Valve, 1" NPT 344 BRL Linear Poly Ball, 6 Sec, TeeJet Connector
35-02116	Valve, 3/4" NPT 334 BRL Linear Poly Ball
35-02083	Valve, 1" NPT 344BR Poly Ball, Nylon Body, 3 Sec
35-02084	Valve, 1 1/2" NPT 346BR Poly Ball, Poly Body, 3 Sec replaces valve with Part No. 879-0072
90-02176	Kit, 1" 801 Flow Meter w/ 1" Straight Hose Barb, 45-05315 adapter cable (Cable in for Mid-Tech; remove for TeeJet)
120-0151	1 1/2" Std Flow Meter, 1 1/2" Hose Barb, 9-185 gpm; *Requires one of two cables listed below
405-0044	*Cable, Flow Meter Interface, 12 ft
405-0056	*Cable, Flow Meter Interface, 24 ft
90-02315	Kit, 26 mm Flow Meter - 0.5m Cable, Deutsch Connector w/ 1 1/2" Hose Barb (MidTech w/ 45-05315 Cable)
90-02315	Kit, 26 mm Flow Meter - 0.5m Cable, Deutsch Connector w/ 1 1/2" Hose Barb (TeeJet)



801 Flow Meter



26mm Flow Meter

Flow Meters for TeeJet & Mid-Tech

A range of flow meters are available to match your application. Flow rates from 0.8 gpm to 400 gpm in a range of styles. If you do not see the flow meter you need listed, please call our NCI Parts Department and we will gladly assist you.

744A Ball Valve Kit w/ High Capacity Regulator Valve

Includes:

- Higher flow capacity regulating valve
- Ball valve harness that mates to shut-off ball valve manifolds
- PSI Gauge

Does not include:

- Boom Shut Off Valve



344 Valve

			98-70025	Manual, Maintenance Instruction, MI 744A	1	
Model Number	Max Pressure	Flow Rate at a 5 PSI Pressure Drop	90-02579	35-02087	344BRL Valve, 3/4" Ball Linear, Reg w/ 1" Fittings, 18 Sec/ 27 GPM	1
				45-05385	Cable, Power Fused, 744	1
45-10072	Harness, 744 Console, 12 ft, Miller	1				
45-10080	Harness, 744 Ball Valve	1				
64-50023	Bracket Mounting, CP36990-NYB	1				
67-20004	Fitting, Tee w/ Gauge, CP21476-NYB	1				
67-20005	Nipple, 3/4" Close Nylon, CP21737-NYB	1				
75-50035	Housing, Control 300L-3, 37203-300L-3 (300 PSI Gauge)	1				
80-01017	Box, 14" x 10" x 8"	1				
84-01017	Label, Console/Flag	1				
90-50141	Kit, Accessory Bag, 37225-COMMAT	1				
98-70025	Manual, Maintenance Instruction, MI 744A	1				

Model Number	Max Pressure	Flow Rate at a 5 PSI Pressure Drop
344BR-2	300 PSI	32 GPM
344BR-3	300 PSI	24 GPM
344BRL-2	300 PSI	27 GPM
* 344BPR-2	300 PSI	12 GPM
* 344BPR-3	300 PSI	12 GPM
346BR-2	150 PSI	100 GPM
346BR-3	150 PSI	64 GPM
* 346BPR-2	150 PSI	53 GPM
* 346BPR-3	150 PSI	53 GPM

430 Ball Valve Series - On/Off Valves NEW

- Choose 2-way, 3-way, or flow back functionality with a wide range of boom section counts. Many inlet, outlet, and electrical connection options
- Install more valves in existing space and increase control capability - up to 15 booms
- Automatic Boom Section Control compatible
- The flow rate is 9.2 GPM at a 5 PSI pressure drop, 13.7 GPM at a 10 PSI pressure drop

430EC Series
2 Way



430EC Series
Flowback



Features	430 2-Way Ball Valve	430 Flow Back Ball Valve
Reliable on/off control	✓	✓
Instant shut-off at spray tips		✓
Special feature	Std on/off control	Boom side of valve; solution returned to tank
Quick response, low amperage	✓	✓
Extensive rate controller compatibility	✓	✓
Automatic boom section control compatibility	✓	✓
Applications	Simple, small- and medium-size sprayers	Wide range of sprayers with moderate per section flow requirements

Kit Part Number	Part Number	Description	Qty
MD-584302433EC2	433EC-2-D	430 Series 3 Valve Manifold; SPST Switch w/ 22 RPM & 0.6 Sec Shutoff Valve; 2 Way Valve; Lg Quick Connect Inlet; Positively Switched w/ DIN Connector	1
	58480EC-05-VX	Mini DIN Cables	3
	58456-1	Large Quick Connect x 1" NPT F Kit	1
	58456-1/4	Large Quick Connect Gauge PT NPT Kit	3
	45529-90-3/4	3/4 x 90 Hose Barb Outlet	4
MD-585708433EC3FB	433EC-3FB-D	430 Series 3 Valve Manifold, SPST Switch w/ 22 RPM & 0.6 Sec Shutoff Valve; 2 Way Flow Back; Lg Quick Connect Inlet; Positively Switched w/ DIN Connector	1
	58480EC-05-VX	Mini DIN Cables	3
	58456-1	Large Quick Connect x 1" NPT F Kit	1
	58456-1/4	Large Quick Connect Gauge PT NPT Kit	3
	45529-90-3/4	3/4 x 90 Hose Barb Outlet	4
	45529-P	Quick Connect Plug for Flow Back Port	1

450 Series Flow Back Manifold

- Flowback valves allow pressure from the boom lines to be relieved back to the tank when valve is switch off
- 22 RPM, 0.7 second shutoff fully open to close
- Flow rate is 32 GPM with 5 PSI pressure per valve, 45 GPM with 10 PSI pressure drop



450 Series
Front View



450 Series
Back View

Part Number	Description	Qty
SS-453BEC3FBFCVX	450 Flowback 3 Valve Manifold; SPST Switch w/ 22 RPM & 0.7 Sec Shutoff Valve; 50 Series Flange; Poly Ball; Positively Switched w/ 0.5M Connector, VX Connector Code	1
MD-9002579	Manual Spray Control (replaces MD-9050237)	1
TP-M200PLG075	2" Standard Port Prt Flg Plug w/ 3/5" FPT	1
TP-M200PLG025	2" Standard Port Flange w/ 1/4" FPT	1
TP-M100075BRB9000	Flanged x Hose Barb	3
SS-455299034	3/4" x 90 HB Outlet	1
SS-B45529P	Quick Connect Plug	1



TeeJet® DirectoValve®

2-Way Electrically Operated Solenoid Valves

AA144P-, AA144A-, AA145H-, DirectoValve Control Valves

- Stainless steel wetted parts provide additional corrosion resistance.
- Direct acting; large internal flow chamber without pilot hole reduces chance of clogging.

- Operate on 12 VDC system.
- Maximum pressure of 100 PSI.
- Encapsulated solenoid coil can be changed without removing valve from system.
- EPDM diaphragms and seat washers, Viton® optional.

- Continuous flow through bypass connection, with flow to spray line controlled by valve "on-off" action.



AA144P

AA144P-3
(Three Unit)

AA144P DirectoValve Control Valves

- 10 GPM (37.9 l/min) flow with only 5 PSI pressure drop.
- 2.5 amp current draw.
- Polypropylene body for chemical resistance.
- Fabric reinforced Viton diaphragms and seat washers.
- No stroke adjustment required.

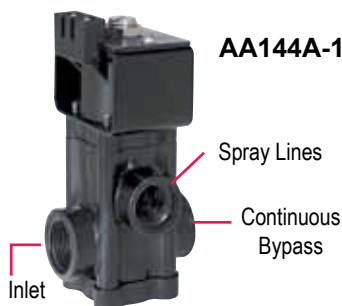
- Corrosion resistant, 430SS solenoid grade armature and armature stop.
- Encapsulated coil and magnetic circuit.

How to order:

To order, specify AA144P- then "1", "2" or "3" to indicate number of units.

Example: AA144P-3

Model Number	Inlet Size	Outlet Size	Current Draw
AA144P-*	3/4"	1/2"	2.5 amp



AA144A-1

AA144A Valve for Pressures up to 100 PSI

- 10 GPM flow with only 5 PSI pressure drop.
- Can be ganged with other 144A DirectoValve control valves.
- 2.5 amp current draw.
- Polypropylene body for chemical resistance.
- Fabric reinforced diaphragms.
- Also available as 2- or 3-unit assembly.

How to order:

To order, specify AA144A- then "1", "2" or "3" to indicate number of units.

Example: AA144A-3

AA144A-3
(Three Unit)

How to order:

Model Number	Inlet Size	Outlet Size	Current Draw
AA144A-*	3/4"	1/2"	2.5 amp



AA145H

AA145H Control Valves

- For pressures to 100 PSI; 15 GPM flow with 5 PSI pressure drop.
- Can be ganged with other 145H DirectoValve control valves.
- 2.9 amp current draw.
- Fiberglass reinforced Nylon body.

How to order:

Specify part number.

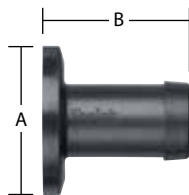
Example: AA145H-1

Model Number	Inlet Size	Outlet Size	Current Draw
AA145H-1	1"	1"	2.9 amp



Features:

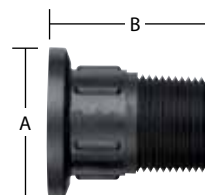
- Polypropylene construction.
- Full port design.
- Viton® O-ring seal available with clamp (not included with flange).



Straight Hose Barb Flanges

Description	Series	"A"	"B"	Part Number
3/4" Hose Barb	50	2" (51 mm)	11 1/16" (43 mm)	CP48150-PP
1" Hose Barb	50	2" (51 mm)	2" (51 mm)	CP45504-PP
1-1/4" Hose Barb	50	2" (51 mm)	2" (51 mm)	CP45505-PP
1-1/2" Hose Barb	50	2" (51 mm)	2" (51 mm)	CP45506-PP
1-1/4" Hose Barb	75	3-1/16" (78 mm)	1-13/16" (46 mm)	CP48160-PP
1-1/2" Hose Barb	75	3-1/16" (78 mm)	2-3/16" (56 mm)	CP46067-PP
2" Hose Barb	75	3-1/16" (78 mm)	2-3/4" (70 mm)	CP48161-PP

- Maximum pressure rating of 200 PSI for 75 series fittings.
- Maximum pressure rating of 300 PSI for 50 series fittings.



Threaded Flanges (Male)

Description	Series	"A"	"B"	Part Number
3/4" Male Pipe Thread	50	2" (51 mm)	2" (51 mm)	CP48172-PP
1" Male Pipe Thread	50	2" (51 mm)	2-3/16" (56 mm)	CP48155-PP
1-1/2" Male Pipe Thread	50	2" (51 mm)	2-3/4" (70 mm)	CP48156-PP
1-1/4" Male Pipe Thread	75	3-1/16" (78 mm)	2-1/2" (64 mm)	CP48165-PP
1-1/2" Male Pipe Thread	75	3-1/16" (78 mm)	2-1/2" (64 mm)	CP48166-PP
2" Male Pipe Thread	75	3-1/16" (78 mm)	2-9/16" (65 mm)	CP48167-PP



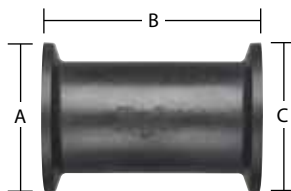
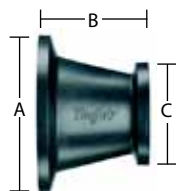
90° Hose Barb Flanges

Description	Series	"A"	"B"	"C"	Part Number
90° × 3/4" Hose Barb	50	2" (51 mm)	1-1/2" (38 mm)	2" (51 mm)	CP48151-PP
90° × 1" Hose Barb	50	2" (51 mm)	1-1/2" (38 mm)	2" (51 mm)	CP48152-PP
90° × 1-1/4" Hose Barb	50	2" (51 mm)	1-15/16" (49 mm)	2-9/16" (65 mm)	CP72238-PP
90° × 1-1/2" Hose Barb	50	2" (51 mm)	1-15/16" (49 mm)	2-9/16" (65 mm)	CP72239-PP
90° × 1-1/4" Hose Barb	75	3-1/16" (78 mm)	1-15/16" (49 mm)	2-9/16" (65 mm)	CP48162-PP
90° × 1-1/2" Hose Barb	75	3-1/16" (78 mm)	1-15/16" (49 mm)	2-9/16" (65 mm)	CP48163-PP
90° × 2" Hose Barb	75	3-1/16" (78 mm)	1-15/16" (49 mm)	3-5/16" (84 mm)	CP48164-PP

Gauge Port Flange

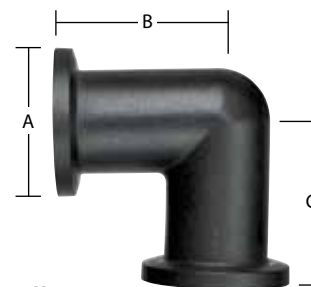
Description	Series	"A"	"B"	Part Number
1/4" Gauge Port	50	2" (51 mm)	3/4" (19 mm)	CP45508-1/4-PP CP(P)45508-1/4-PP
3/8" Gauge Port	50	2" (51 mm)	3/4" (19 mm)	CP45539-3/8-PP CP(P)45539-3/8-PP
Blank Inlet Cover	50	2" (51 mm)	5/16" (8 mm)	CP45507-PP
1/4" Gauge Port	75	3-1/16" (78 mm)	3/8" (9 mm)	CP46127-1/4-PP
3/8" Gauge Port	75	3-1/16" (78 mm)	3/8" (9 mm)	CP46127-3/8-PP
Blank Inlet Cover	75	3-1/16" (78 mm)	3/8" (9 mm)	CP46069-PP

(P)=BSPP



Straight Flange Couplings

Description	Series	"A"	"B"	"C"	Part Number
Straight Coupling	50	2" (51 mm)	2-1/4" (57 mm)	2" (51 mm)	CP48157-PP
Straight Coupling	75	3-1/16" (78 mm)	4-3/8" (111 mm)	3-1/16" (78 mm)	CP48169-PP
Reducer Coupling	75/50	3-1/16" (78 mm)	2-3/16" (56 mm)	2" (51 mm)	CP45207-PP



90° Flange Couplings

Description	Series	"A"	"B"	"C"	Part Number
90° Elbow Coupling	50	2" (51 mm)	2-3/16" (56 mm)	2-3/16" (56 mm)	CP48158-PP
90° Elbow Coupling	75	3-1/16" (78 mm)	2-3/16" (56 mm)	3-1/8" (79 mm)	CP48168-PP



TeeJet® DirectoValve® Flange Fittings



Threaded Flanges (Female)

Description	Series	"A"	"B"	Part Number
1" Female Pipe Thread	50	2"	2"	CP48154-PP
1-1/4" Female Pipe Thread	50	2"	2"	CP45512-PP
1-1/2" Female Pipe Thread	75	3-1/16"	2"	CP46066-PP



Flange Clamps

Part Number	Series	Description
46070	50	2-Way Valve
46024	50	3-Way Valve
55245-50	50	2-Way Valve Stainless Steel
CP7717-2/222-VI	50	Viton® O-ring
55245-75	75	2-Way Valve Stainless Steel
CP7717-2-229-VI	75	Viton O-ring

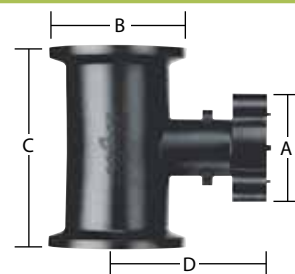
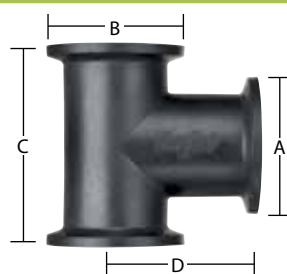


55245-50



55245-75

Note: O-ring included.



Tee Flanges

Description	Series	"A"	"B"	"C"	"D"	Part Number
Tee	50	2"	2"	4-3/8"	2-7/8"	CP50193-PP
Narrow Tee		2"	2"	3-3/16"	2"	CP55242-PP
Reducer Tee	50/75	2"	3-1/16"	4-3/8"	2-7/8"	CP46717-PP
Tee	75	3-1/16"	3-1/16"	4-3/8"	3-1/8"	CP46716-PP
450 Tee Body	75	-	3-1/16"	4-3/8"	3-1/4"	CP45251-PP
450 Tee Body (Narrow)	75	-	3-1/16"	3-1/8"	3-1/4"	CP55224-PP

Note: There are no mounting provisions on the 50 series tee.

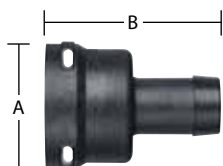
48143 Mounting Kit

Mounts to underside of tee and includes one extrusion and four screws. Mounting kit is not included with tees. Must be ordered separately. Also requires 5/16" or 8 mm bolt.



Description	Part Number
Tee Mounting Kit (450 or 490 series manifold)	48143

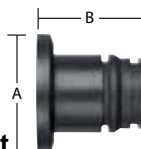
DirectoValve® Quick Connect Fittings



Quick Connect Straight Hose Barb

Description	Series	"A"	"B"	Part Number
1/2" Straight Hose Barb	QC	1-11/16"	2-1/4"	45529-1/2
3/4" Straight Hose Barb				45529-3/4
QC Straight Hose Barb				45529-1
Quick Connect Cap		1-11/16"	1-1/8"	45529-C
Quick Connect Plug		1-7/16"	1-5/16"	45529-P

Note: O-ring and clip included.



Quick Connection Outlet

Description	Series	"A"	"B"	Part Number
Male Quick Connect Flanged	50	2"	1-3/16"	CP46029-PP
Quick Connect	3/4" (M)	1-5/16"	2"	CP45527-NYB
Quick Connect	1" (M)	1-5/16"	2"	CP45526-NYB



90° Quick Connect Hose Barb

Description	Series	"A"	"B"	"C"	Part Number
1/2" 90° Hose Barb	QC	1-11/16"	2-19/64"	1-5/8"	45529-90-1/2
3/4" 90° Hose Barb					45529-90-3/4
1" 90° Hose Barb					45529-90-1

Note: O-ring and clip included.



Clip and O-Ring

Description	Part Number
Retaining Clip 302SS	CP37166-302SS
O-Ring (Viton®)	CP7717-3-912-VI

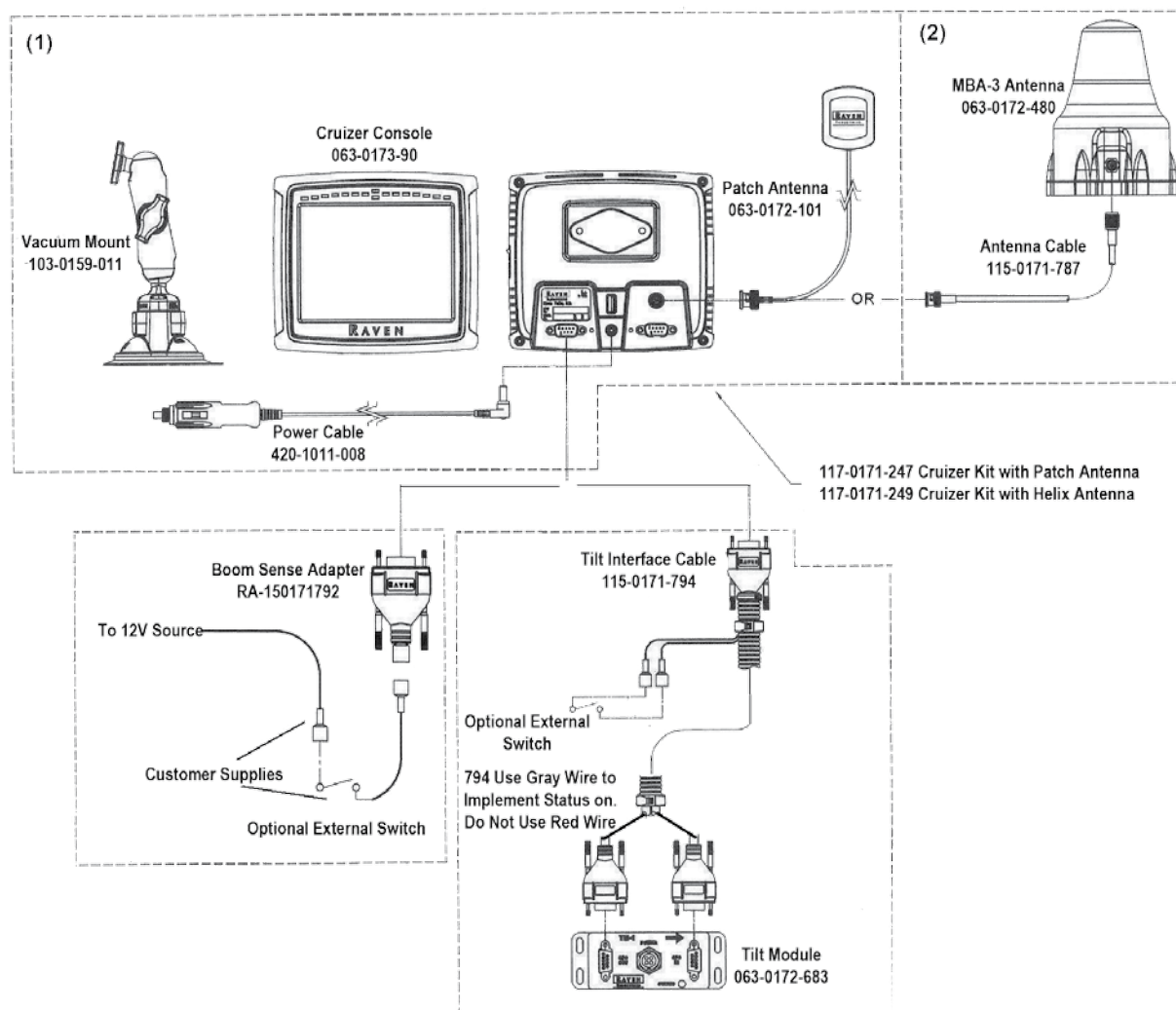


Raven Cruiser II Benefits:

- Brilliant 5.7" high-resolution touch-screen display features easy to understand icon-based menus, status indicators, and day/night mode for simple operation.
- Simple installation/mounting for hassle-free installation and use with multiple machines.
- Built-in 10 Hz DGPS receiver and external DGPS antenna for accurate sub-meter guidance.
- Integrated lightbar system for added confidence and visual support.
- Enhanced "Last Pass" guidance with automatic correction simplifies contour and irregularly shaped fields and prevents repeating errors.
- Record keeping made simple with file formats for saving, reporting and importing data.
- Straight A-B, Last Pass, Fixed Contour and Pivot field patterns for greater accuracy, speed and convenience.
- Bird's-eye view and downfield 3-D perspective for checking coverage and keeping you on line.
- Simple upgrades for assisted steering and automatic planter and boom section controls for greater precision, savings and performance.
- Digi-Star® scale interface for spreading manure more accurately on fields.
- Optional yield monitoring for recording valuable production data and making better decisions.
- Weather-resistant model available for rain/dust protection in open-cab situations.

Cruizer II Kits and Accessories

Part No.	Description	Part No.	Description
117-0171-247	Kit, Cruiser w/ Patch Antenna	Optional Add on to Kit	Cruizer Care: If Cruiser II breaks, call Raven for problem solving. If it is defective, Raven sends you a new Cruiser II next day air. Customer sends defective Cruiser back to Raven
117-0171-249	Kit, Cruiser w/ Helix Antenna		
117-0171-250	Kit, Weather Resistant Cruiser w/ Patch		
117-0171-245	Kit, Weather Resistant Cruiser w/ Helix		



ACCESSORIES

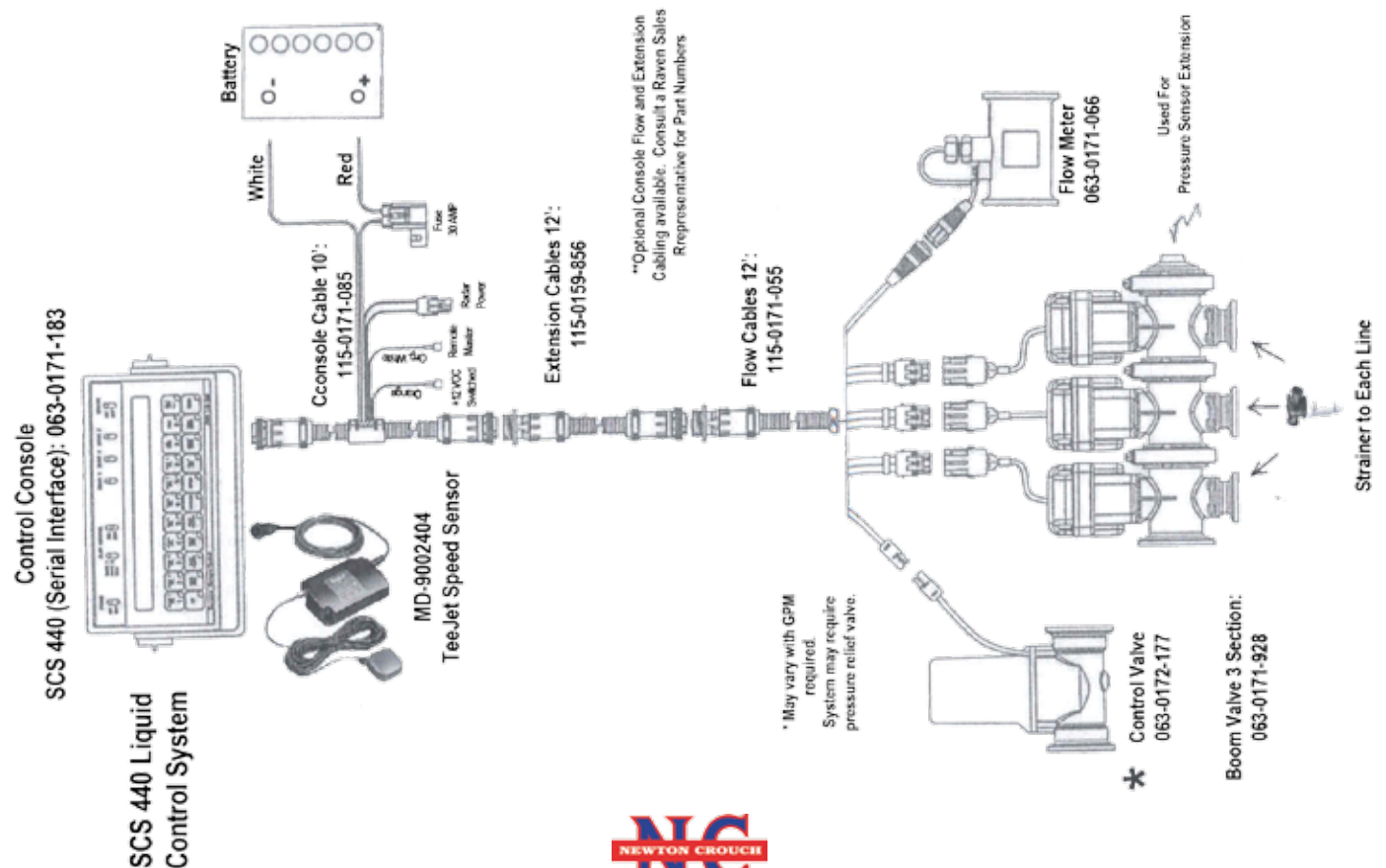
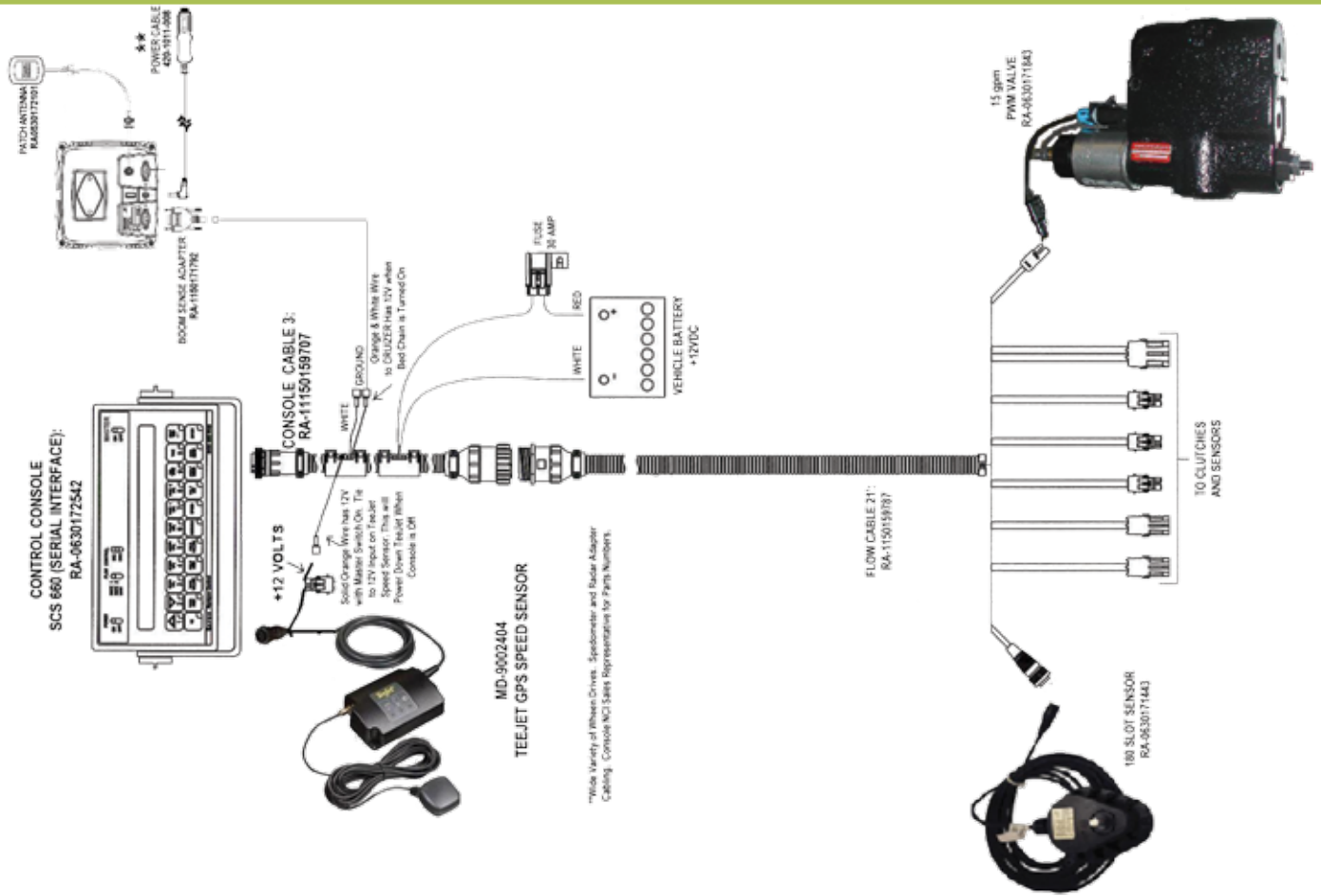
Part No.	Description	Part No.	Description
Cruizer II Accessories		LightBar	
RA-4201011008	Power Cable	RA-0630172346	RGL 600 Lightbar
RA-1150171792	Boom Sense Adapter	RA-1170159930	Magnetic Mounting Kit
RA-1030159011	Mount, Vacuum RAM w/ Ball	RA-1150171137	Cable, 28 ft for Lightbar
RA-4201011008	Cable PWR 12V	Control Consoles	
Viper Pro & Accessories		RA-0630171183	SCS 440 Liquid Control Console
RA-0630172879	Viper Pro Console	RA-0630172542	SCS 660 Granular Control Console
RA-1170159930	Magnetic Mounting Kit	Switchboxes & Adapter	
RA-0630172373	Can Control Node	LW-44224	Bedchain Switch for Viper Pro
RA-1150171216	Speed Adapter	RA-0630171954	Switch Box
RA-0630172272	Boom Speed Node	NC-015005DNP	Adapter, 2" Rear Roller
RA-0630172373	Control Node	Sensors & Valves	
RA-1150171137	Cable, RGL 500 to Switchbox	RA-0630171443	180 Slot Sensor w/ 25 ft Cable
RA-1150159707	Cable Assy, 3 ft, 450/460	RA-0630171843	Valve, PWM, 15 GPM
RA-1150159787	Cable, Slow, 21 ft	RA-0630172177	Valve, Control
RA-1150171763	Cable, 2 ft CON Viper Pro 4 x 0/ 6 x 0	RA-0630171928	Valve, Boom Valve 3 Section
RA-1150159822	Cable, Connect RGL 600 Lightbar	RA-0630171066	Flow Meter
GPS Receivers, Antennas, & Cables		MD-9002404	Speed Sensor, TeeJet GPS
RA-0630172101	Antenna, Patch	Tilt & Tilt Gyro	
RA-0630172480	Antenna, MBA-3 Helix	117-0171-180	Kit, Tilt w/ Cruizer Cable
RA-1150171787	Antenna Cable	115-0171-794	Tilt Interface Cable, Cruzier II
RA-1170171071	Receiver Kit, Pheonix 200, includes cable	063-0172-683	Tilt Module, Cruizer II
RA-0630172719	Receiver, Pheonix 200	RA-1170171059KIT	Tilt Module for Viper Pro
RA-1150171137	Cable, Tie-in for Viper Pro to RGL600		
RA-1150171216	Cable, Speed		
RA-1150159707	Cable,		
RA-1150171055	Cable, Flow 12 ft		
RA-1150159787	Cable, Flow 21 ft		
RA-1150171361	Cable, Port B, GPS Interface		
RA-1150159707	Cable, Console 3 ft		
RA-1150171085	Cable, Console 10 ft		
RA-1150159856	Cable, Extension 12 ft		

The Raven accessories and parts listed are the commonly parts used on NCI Equipment. NCI carries a variety of other Raven parts for speciality equipment. Please call an NCI Parts Representative to assist you.

SCS 440 & SCS 660 CONTROLLERS

RAVEN
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PRECISION & GUIDANCE



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NEWTON CROUCH