MODEL 3600V
TWIN-LINE® PLANTER
(Mechanical Seed Metering)

OPERATOR & PARTS MANUAL

PM0212 4/08

This manual is applicable to: Model: 3600V Twin-Line® Planters
Serial Number: 621654 And On

Record the model number and serial number of your planter along with date purchased:

Model Number 3600V

Serial Number _____

Date Purchased _____

Monitor Serial Number _____

Measured Pulses Per Mile/Km (Radar Distance Sensor) _____

Measured Pulses Per Mile/Km (Magnetic Distance Sensor) _____

SERIAL NUMBER

The serial number plate is located on the planter frame to be readily available. It is suggested that your serial number and purchase date also be recorded above.

The serial number provides important information about your planter and may be required to obtain the correct replacement part. Always provide the model number and serial number to your KINZE® Dealer when ordering parts or anytime correspondence is made with KINZE Manufacturing, Inc.

D05140843



KINZE®, the KINZE® logo, Twin-Line®, Interplant® and KINZE Vision® are registered trademarks of KINZE Manufacturing, Inc.

PARTS LIST INDEX

ROW UNIT

15" Seed Opener Disc Blade/Bearing Assembly And Scrapers P11
Brush-Type Seed Meter P23
Coulter Mounted Residue Wheels P30
Covering Discs/Single Press Wheel P14
Drag Closing Attachment P18
Finger Pickup Seed Meter P22
Frame Mounted Coulter W/Residue Wheels P32
Gauge Wheels P12
Hopper Support And Meter Drive P20
Parallel Arms, Mounting Support Plate And Pneumatic Down Pressure Package P4
Parallel Arms, Mounting Support Plate And Quick Adjustable Down Force Springs Option P10
Pneumatic Down Pressure Control Box, Sending Unit And Harnesses P6
Pneumatic Down Pressure Air Compressor, Dual Solenoid Assembly, Tubing And Fittings P8
Row Unit Mounted Disc Furrower P26
Row Unit Mounted No Till Coulter P25
Row Unit Mounted Residue Wheel P28
Seed Hopper And Lid P21
Shank Assembly, Seed Tube And Depth Adjustment P2
Spring Tooth Incorporator P24
“V” Closing Wheels P16

BASE MACHINE

2-Point Hitch Option P38
Axle Assembly P52
Center Frame P44
Center Pivot P50
Cylinders P64
Electrical Components P84
Ground Drive Wheel P57
Hose Take-Up P42
Hydraulic Drive P46
Hydraulic Hoses And Fittings P78
Inner Hitch P40
Outer Hitch P36
Row Marker Assemblies P60
Row Marker Spindle/Hub/Blade P58
Safety Chain P36
Transport Wheels/Rock Guards P54
Valve And Junction Blocks P70
Valve Box Module P82
Valves (Solenoid, Flow Control, Pressure Relief, Check, Proportional) P76
Wing Frame P48
Wing Wheel Module P56

ELECTRONIC SEED MONITOR

Planter Monitor Module (PMM) P88
KINZE Vision® Display P86

INTERPLANT® SYSTEM

Interplant® Push Row Unit P34
Interplant® Push Row Unit Drive P90

FERTILIZER

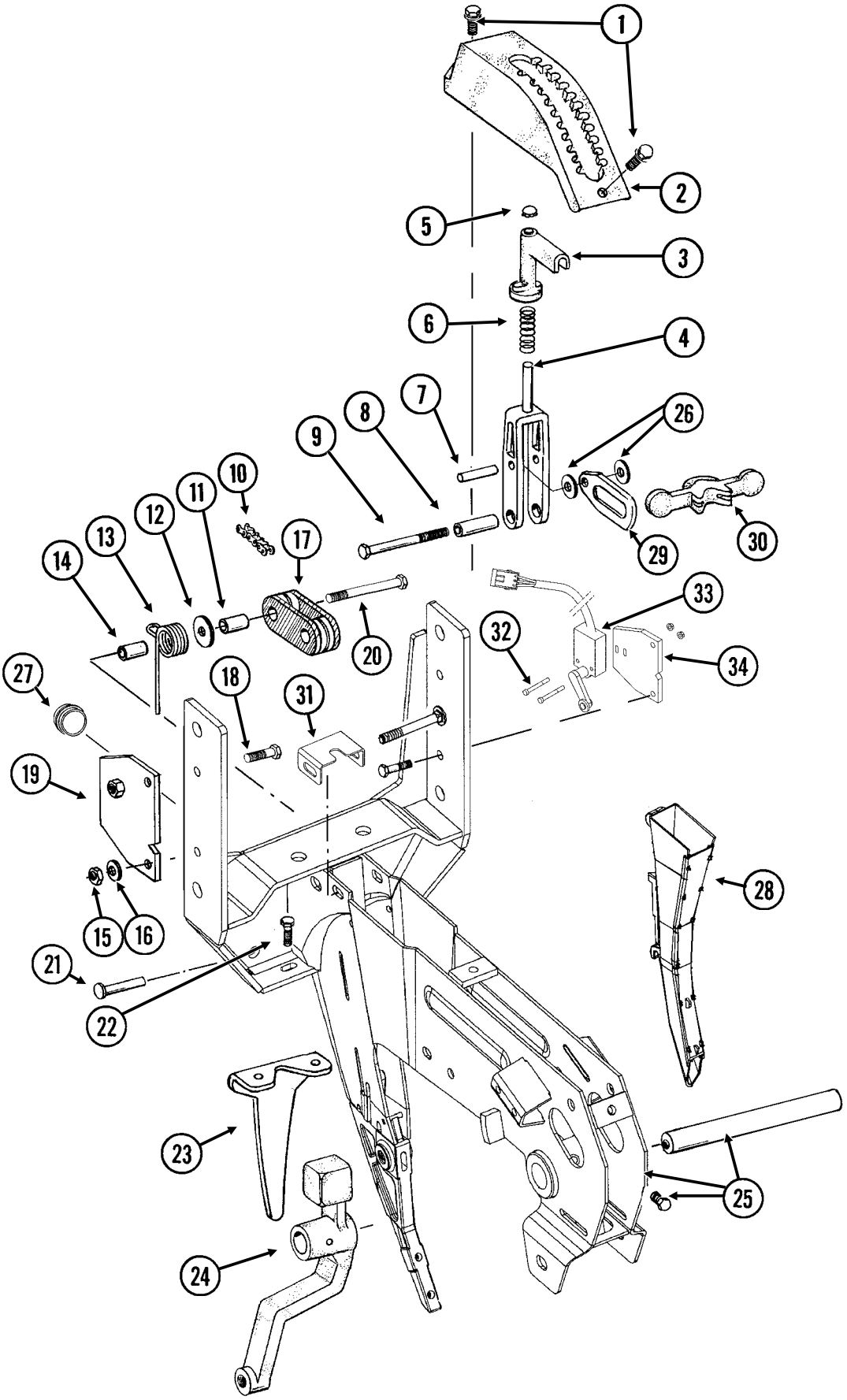
Fertilizer Openers, Mounts And Attachments P92
Liquid Fertilizer P104
Rear Trailer Hitch P114

Decals, Paint And Miscellaneous P116

Numerical Index P119

SHANK ASSEMBLY, SEED TUBE AND DEPTH ADJUSTMENT

(RU166/D16245)



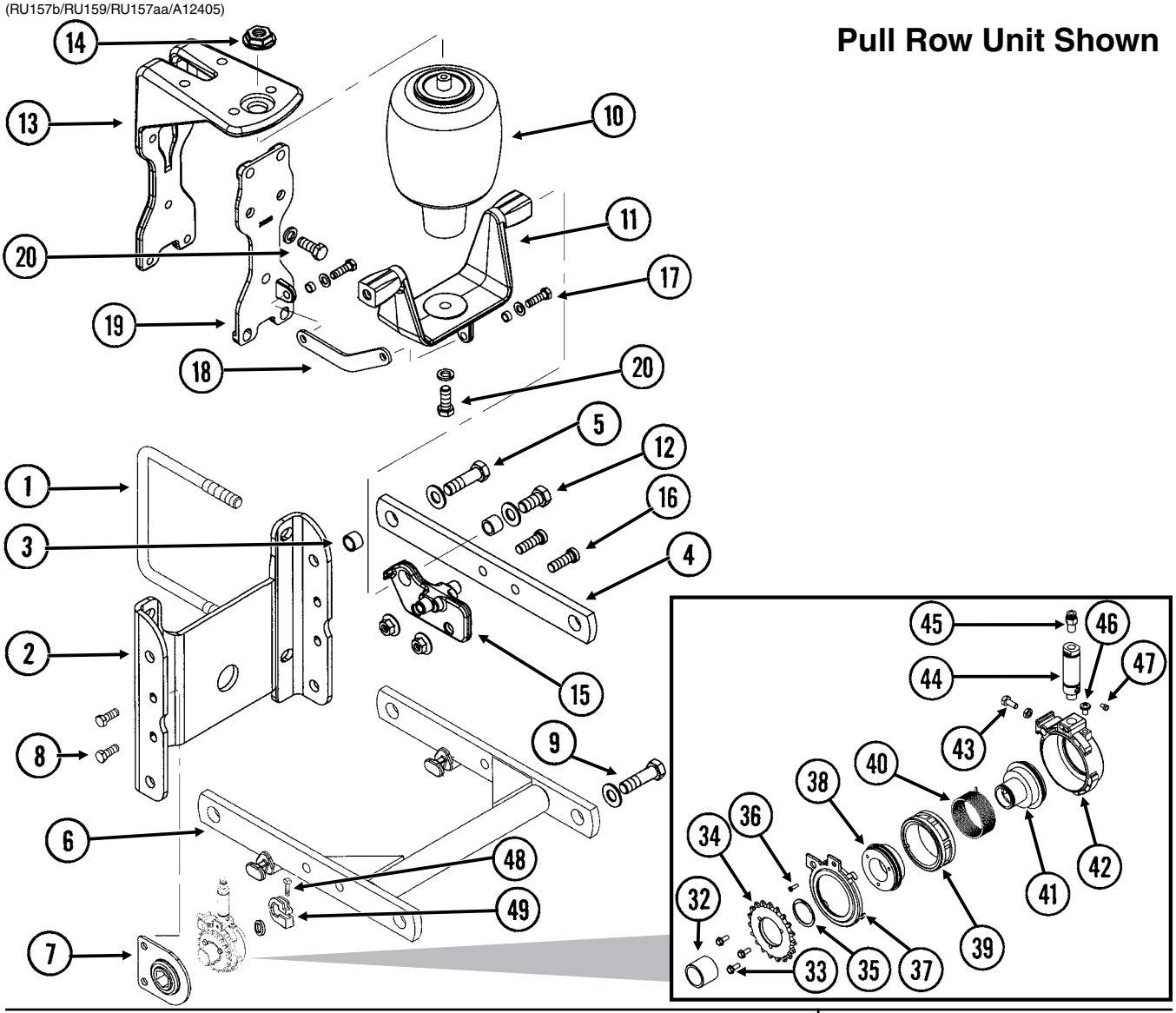
SHANK ASSEMBLY, SEED TUBE AND DEPTH ADJUSTMENT

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G11015	2	Hex Washer Head Cap Screw, 3/8"-16 x 1 1/4"
2.	GB0274	1	Cover, Depth Adjustment
3.	GB0266	1	Handle, Depth Adjustment
4.	GB0267	1	Lever, Depth Adjustment
5.	GD3612	1	Cap Plug
6.	GD10993	1	Spring
7.	GD13361	1	Pin, 3/8" x 1 2/3"
8.	GD11259	1	Sleeve, 3/8" I.D. x 5/8" O.D. x 1 25/32" Long
9.	G11008	1	Hex Head Cap Screw, 3/8"-24 x 2 1/2", Grade 8
	G11007	1	Lock Nut, 3/8"-24, Grade C
10.	G3303-98	1	Chain, No. 41, 98 Pitch Including Connector Link
	G3303-16	1	Chain, No. 41, 16 Pitch Including Connector Link (Used W/Row Unit Extension Brackets)
	GR0196	1	Connector Link, No. 41
11.	GD1026	1	Sleeve, 1 3/16" Long
12.	G10201	1	Special Washer, 3/8" x 1 1/2" O.D.
13.	GD1065	1	Idler Spring
14.	GD7318	1	Sleeve, 1" Long
15.	G10108	1	Lock Nut, 3/8"-16
16.	G10210	1	Washer, 3/8" USS
17.	GD11962	1	Idler
18.	G10003	3	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G10108	3	Lock Nut, 3/8"-16
19.	GD10867	2	Stop
20.	G10326	1	Hex Head Cap Screw, 3/8"-16 x 3 3/4"
21.	G10551	1	Clevis Pin, 1/4" x 2 1/2"
	G10669	1	Hair Pin Clip, No. 22
22.	G10312	2	Carriage Bolt, 5/16"-18 x 3/4"
	G10620	2	Serrated Flange Nut, 5/16"-18
23.	GD1033	1	Shield
24.		-	See “Gauge Wheels”, Pages P12 And P13
25.	GA10157	1	Shank W/Gauge Wheel Pivot Spindle And Set Screw
	GD11001	-	Spindle
	G10438	-	Hex Head Cap Screw, 1/2"-13 x 3/4"
26.	G10207	2	Washer, 7/8" O.D. x 13/32" I.D. x .134" (If Applicable)
27.	GD11845	1	Dust Cap
28.			See “KINZE Vision® Display, Pages P86-P87
29.	GB0285	1	Collar, Depth Adjustment
30.	GB0265	1	Pivot Link, Depth Adjustment
31.	GD16245	-	Sun Shade (Rubber)
32.	G11298	2	Hex Slotted Head Cap Screw, #10-32 x 1"
	G11284	2	Serrated Flange Nut, #10-32
33.	GA13580	1	Limit Switch W/Cable
34.	GD19317	1	Implement Switch Bracket
A.	GA13593	-	Implement Switch Assembly, (Items 32-34)

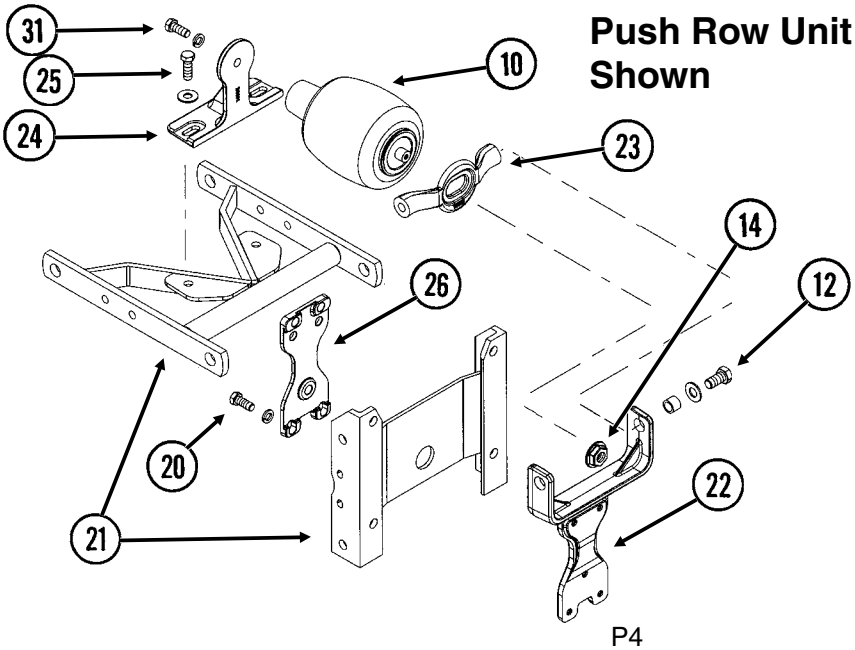
PARALLEL ARMS, MOUNTING SUPPORT PLATE AND PNEUMATIC DOWN PRESSURE PACKAGE

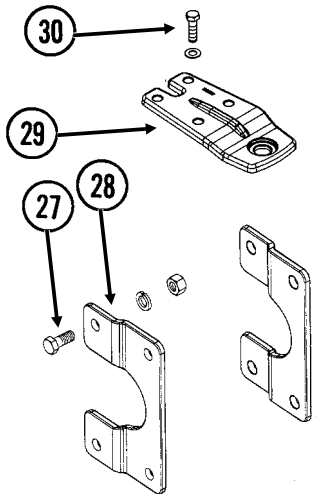
(RU157b/RU159/RU157aa/A12405)

Pull Row Unit Shown



Push Row Unit Shown



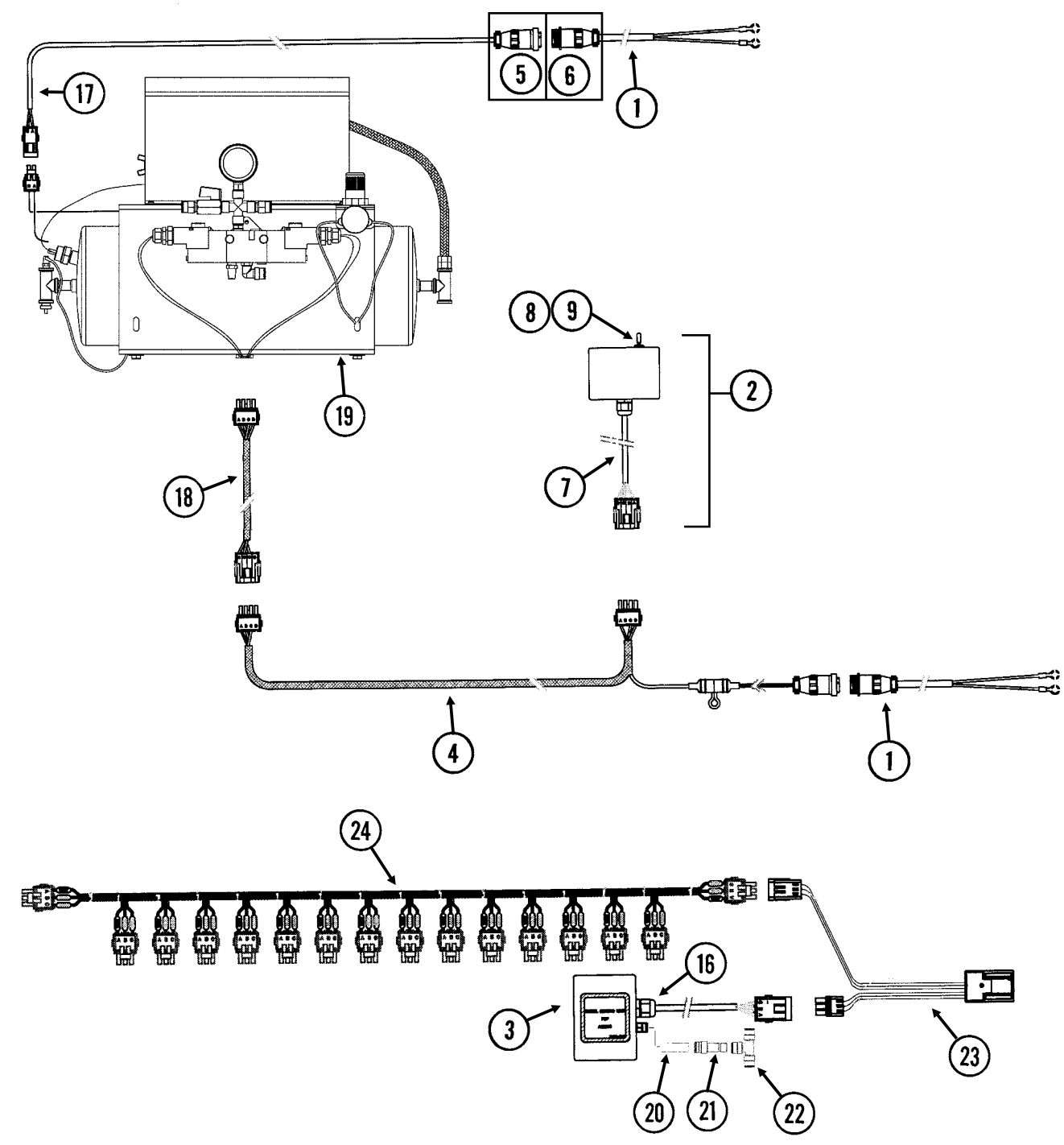


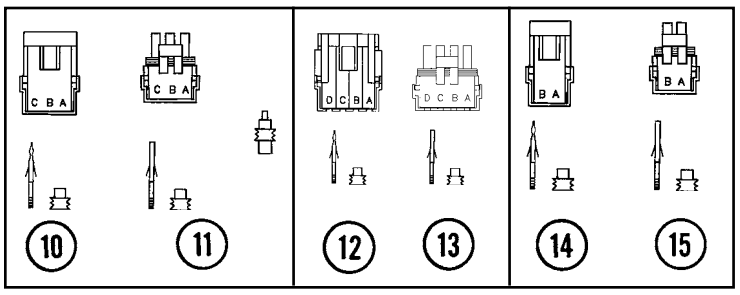
PARALLEL ARMS, MOUNTING SUPPORT PLATE AND PNEUMATIC DOWN PRESSURE PACKAGE

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	GD1113	2	U-Bolt, 5" x 7" x 5/8"-11
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
2.	GD10036	1	Mounting Support Plate
3.	GB0218	4	Bushing, 21/32" I.D. x 7/8" O.D. x 19/32" Long
4.	GD11422	2	Upper Parallel Arm
5.	G10732	4	Hex Head Cap Screw, 5/8"-18 x 2"
	GD7805	4	Special Washer, 5/8", Hardened
	G10412	4	Lock Nut, 5/8"-18
6.	GA5651	1	Lower Parallel Arm
7.	GA1720	1	Bearing/Sprocket, 7/8" Hex Bore
8.	G10001	2	Hex Head Cap Screw, 3/8"-16 x 1"
	G10229	2	Lock Washer, 3/8"
	G10101	2	Hex Nut, 3/8"-16
9.		-	See “Hopper Support And Meter Drive”, Page P20
10.	GA11982	1	Air Spring Assembly
11.	GB0394	1	Saddle
12.	G11018	2	Hex Head Cap Screw, 5/8"-18 x 1 1/4"
	GD7805	2	Special Washer, 5/8", Hardened
	GD3180-30	2	Sleeve, 7/8" O.D. x 5/8" I.D. x 21/32"
13.	GB0396	1	Head Mount
14.	GB0397	1	Shoulder Nut, 3/4"-16
15.	GB0395	2	Bracket
16.	G11220	4	Hex Socket Cap Screw, 1/2"-13 x 1 1/2"
	G10071	4	Serrated Flange Nut, 1/2"-13
17.	G10004	2	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
	G10203	2	Washer, 3/8" SAE
	GD11963-04	2	Spacer, 1/4"
	G10108	2	Lock Nut, 3/8"-16
18.	GD17794	1	Link
19.	GB0393	1	Plate
20.	G10037	7	Hex Head Cap Screw, 1/2"-13 x 1 1/4"
	G10206	2	Washer, 1/2" SAE (Lower Two Holes Only)
	G10228	7	Lock Washer, 1/2"
21.		-	See “Interplant Push Row Unit”, Pages P34 And P35
22.	GB0390	1	Yoke Mount
23.	GB0392	1	Yoke
24.	GB0391	1	Mount
25.	G10017	2	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10216	2	Washer, 1/2" USS
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-11
26.	GB0389	1	Plate
27.	G10007	4	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
28.	GB0366	2	Extension Bracket
29.	GB0398	1	Extension
30.	G10039	4	Hex Head Cap Screw, 1/2"-13 x 1 3/4"
	G10206	4	Washer, 1/2" SAE
	G10111	4	Lock Nut, 1/2"-13
31.	G10037	1	Hex Head Cap Screw, 1/2"-13 x 1 1/4"
	G10228	1	Lock Washer, 1/2"
32.	GD18891	1	Spacer, 1 1/4" O.D. x 1"
33.	G10020	1	Hex Head Cap Screw, 1/4"-20 x 5/8"
34.	GR1812	1	Sprocket, 19 Tooth
35.	G11295	1	Retaining Ring
36.	G11243	1	Slotted Flat Head Machine Screw, No. 8-32 x 1/2", Stainless Steel
37.	GR1894	1	Air Housing Cover
38.	GR1815	1	Sprocket Hub
39.	GR1818	1	Ratchet Gear
40.	GR1813	1	Clutch Spring
41.	GR1830	1	Hex Bushing
42.	GR1895	1	Air Clutch Housing
43.	G10023	3	Hex Head Cap Screw, 1/4"-20 x 3/4"
	G10103	3	Hex Nut, 1/4"-20
44.	GR1896	1	Air Cylinder
45.	GR1819	1	Push Connect, 1/8" NPT Male x 1/4"
46.	G11296	1	Pan Head Machine Screw, 1/4"-20 x 3/4" x 3/4"
47.	GR1898	1	Filter
48.	G10130	-	Square Head Machine Bolt, 5/16"-18 x 1 3/4"
	G10923	-	Flange Nut, 5/16"-18, No Serration
49.	GD11045	-	Lock Clamp
A.	G6325X	-	U-Bolt Package For 5" x 7" Toolbar, Includes: (2) GD1113, (4) G10230, (4) G10104
B.	GA12405	-	Air Clutch Assembly, (Items 32-48)

PNEUMATIC DOWN PRESSURE CONTROL BOX, SENDING UNIT AND HARNESSES

(PNE30b/MTR27a/ELC27b/MTR45/MTR27t/PNE30c)



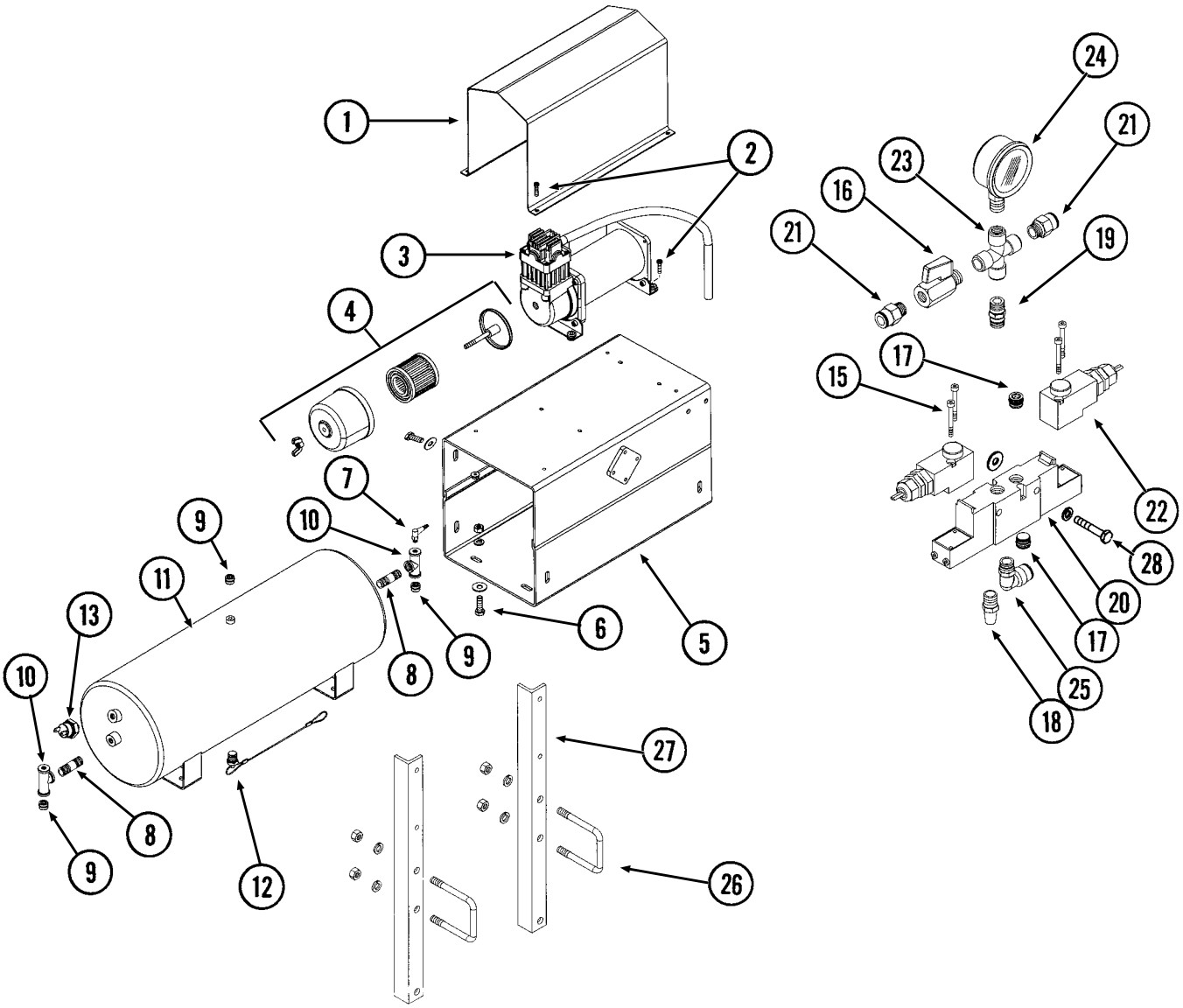


PNEUMATIC DOWN PRESSURE CONTROL BOX, SENDING UNIT AND HARNESSES

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA7856	2	Power Lead Adapter
2.	GA12813	1	Control Box Assembly
3.	GA12815	1	Sending Unit
4.	GA12814	1	Wiring Harness W/Fuse Holder And Fuse, 206"
	GD14258	-	Fuse Holder
	GD14660	-	Fuse, 2 Amp Delay Action
5.	G1K268	-	Console Cable Connector Kit, Includes: (1) 3-Pin Connector, (1) Cable Clamp, (1) Lock Ring, (3) Female Terminal Pins
6.	G1K267	-	Console Cable Connector Kit, Includes: (1) 3-Pin Connector, (1) Cable Clamp, (3) Male Terminal Pins
7.	GA9964	1	Strain Relief
8.	GR1363	1	Hex Face Nut, 15⁄32"-32
	GR1364	1	Internal Tooth Lock Washer, 15⁄32"
9.	GA6978	1	Switch, 3 Position Toggle, Momentary On-Off-Momentary On
10.	G1K248	-	3-Pin Female Connector Kit (Black), Includes: (3) 3-Pin Female Housings, (9) Pin Contacts, (9) Seals
11.	G1K252	-	3-Pin Male Connector Kit (Black), Includes: (3) 3-Pin Male Housings, (9) Socket Contacts, (9) Seals
12.	GA8328	-	4-Pin Female Connector Kit, Includes: (1) 4-Pin Female Housing, (4) Pin Contacts, (4) Seals
13.	GA8329	-	4-Pin Male Connector Kit, Includes: (1) 4-Pin Male Housing, (4) Socket Contacts, (4) Seals
14.	G1K321	-	2-Pin Female Connector Kit (Black), Includes: (3) 2-Pin Female Housings, (6) Pin Contacts, (6) Seals
15.	G1K320	-	2-Pin Male Connector Kit (Black), Includes: (3) 2-Pin Male Housings, (6) Socket Contacts, (6) Seals
16.	GA9964	2	Strain Relief
17.	GA12684	1	Wiring Harness W/Fuse Holder And Fuse, 60'
	GD14258	-	Fuse Holder
	GD18275	-	Fuse, 20 Amp
18.	GA12858	1	Wiring Harness, 60'
19.			See “Pneumatic Down Pressure Air Compressor, Dual Solenoid Assembly, Tubing And Fittings”, Pages P8 And P9
20.	GD17151-06	1	Nylon Tubing, ¼" O.D. x 1 ½'
21.	GD18796	1	Reducer, ⅜" To ¼"
22.	GD18010	1	Tee, ⅜" Tube Union
23.	GA12812	1	Hall Effect Adapter
24.			See “Planter Monitor Module (PMM)”, Pages P88 And P89

PNEUMATIC DOWN PRESSURE AIR COMPRESSOR, DUAL SOLENOID ASSEMBLY, TUBING AND FITTINGS

(PNE06a/PNE02/PNE05/A13169/PNE09/PNE08)

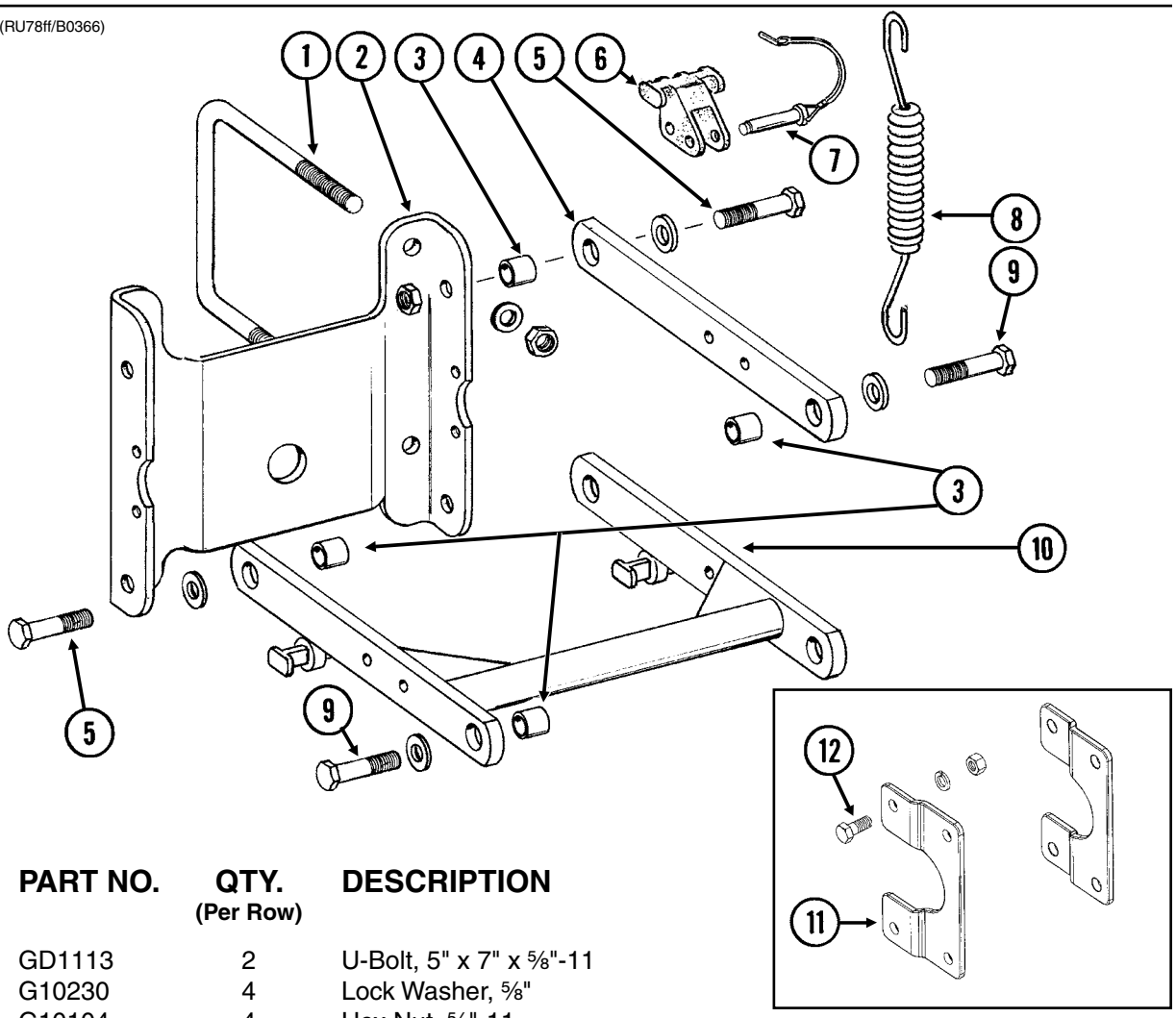


PNEUMATIC DOWN PRESSURE AIR COMPRESSOR, DUAL SOLENOID ASSEMBLY, TUBING AND FITTINGS

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD18112	1	Cover
2.	G11066	8	Phillips Pan Head Machine Screw, No. 10-24 x ¾", Stainless Steel
	G10992	8	Serrated Flange Nut, No. 10-24
3.	GA12102	1	Air Compressor
4.	GA12404	1	Filter Assembly
	GR1809	-	Filter
5.	GA12358	1	Mount
6.	G10019	8	Hex Head Cap Screw, 5⁄16"-18 x 1"
	G10219	8	Washer, 5⁄16" USS
	G10232	8	Lock Washer, 5⁄16"
	G10106	8	Hex Nut, 5⁄16"-18
7.	GA13512	1	Valve Stem, ¼" NPT
8.	GD19238	2	Nipple, ¼" NPT
9.	GD17156	3	Plug, ¼" NPT
10.	GD19237	2	Tee, ¼" NPT
11.	GA11988	1	Tank, 3 Gallon
12.	GA11991	1	Drain, ¼" NPT
13.	GR1778	1	Pressure Switch
14.	GA13169	1	Tube Cutter W/Blade
	GR1843	-	Blade
15.	G11247	4	Slotted Pan Head Machine Screw, M4-0.7 x 8
16.	GA11992	1	Shutoff Valve, ¼" NPT
17.	GD17156	2	Plug, ¼" NPT
18.	GA11997	1	Breather, ¼" NPT
19.	GD17154	1	Connector, ¼" Male
20.	GA11993	1	Block
21.	GD17141	3	Connector, ¼" Male
22.	GA11994	2	Solenoid
23.	GD18078	1	Female Cross, ¼" NPT
24.	GA12104	1	Pressure Gauge, ¼" NPT
25.	GD17143	1	Swivel Elbow, ¼" NPT x ⅜"
26.	GD4743	2	U-Bolt, 3" x 3" x ½"-13
	G10228	4	Lock Washer, ½"
	G10102	4	Hex Nut, ½"-13
27.	GD18119	2	Bracket
28.	G10040	2	Hex Head Cap Screw, ¼"-20 x 1 ¾"
	G10227	2	Lock Washer, ¼"
	G10209	2	Washer, ¼" USS
29.	GD18010	-	Tee, ⅜" Tube Union
30.	GD17150-03	-	Nylon Tubing, ⅜" O.D. x 64', 12 Row Pull Row Units
	GD17150-04	-	Nylon Tubing, ⅜" O.D. x 86', 16 Row Pull Row Units
	GD17150-08	-	Nylon Tubing, ⅜" O.D. x 60', 11 Row Push Row Units
	GD17150-09	-	Nylon Tubing, ⅜" O.D. x 82', 15 Row Push Row Units
	GD17150-12	-	Nylon Tubing, ⅜" O.D. x 5', Even-Row Push Row Unit
31.	GD18011	-	Elbow, ⅜" x ⅛" NPT Extended
32.		-	See “Parallel Arms, Mounting Support Plate And Pneumatic Down Pressure Package”, Pages P4 And P5
33.	GD18274	-	Tee, ⅜" x ⅛" NPT Extended, Push Row Unit
A.	GA12626	-	Air Compresor Assembly (Items 1-14)
B.	GA11995	-	Dual Solenoid Assembly (Items 15-25)

PARALLEL ARMS, MOUNTING SUPPORT PLATE AND QUICK ADJUSTABLE DOWN FORCE SPRINGS OPTION

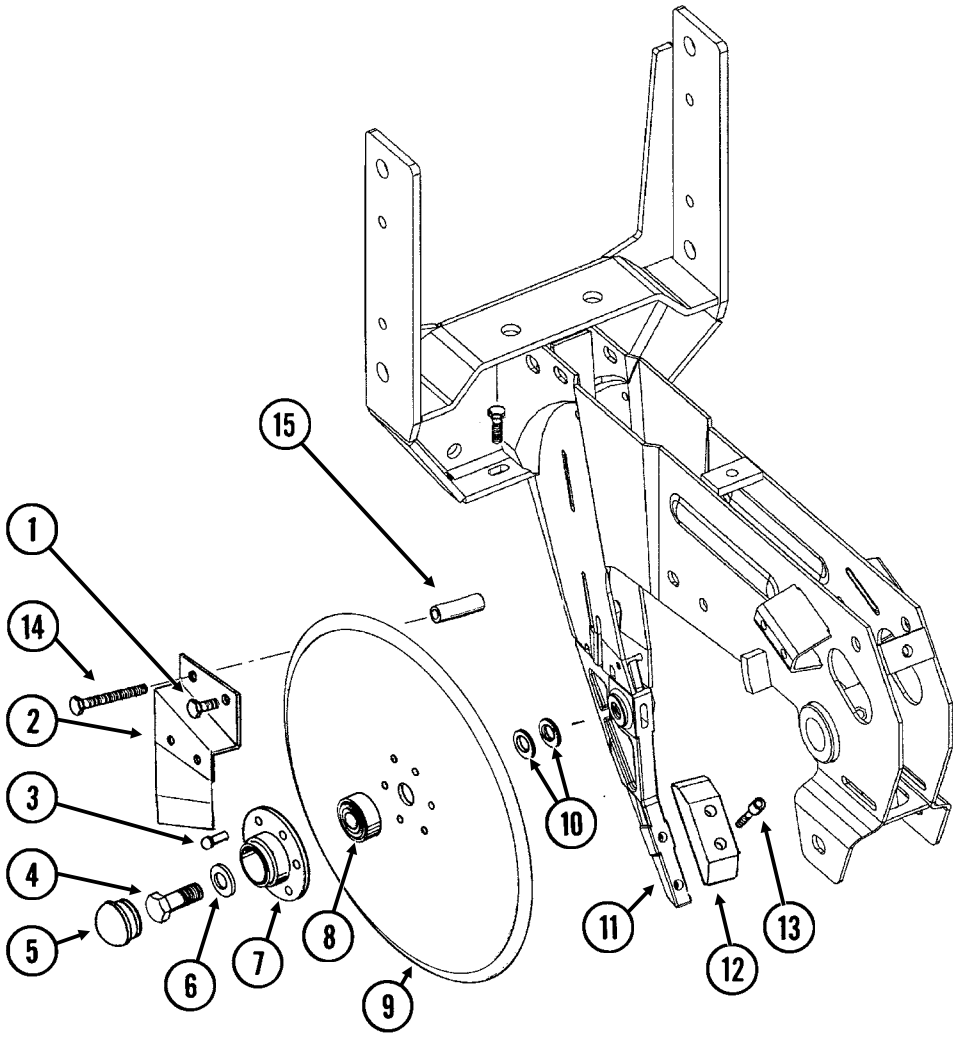
RUB021/RUB022(RU78ff/B0366)



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	GD1113	2	U-Bolt, 5" x 7" x 5/8"-11
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
2.	GD10036	1	Mounting Support Plate
3.	GB0218	4	Bushing, 21/32" I.D. x 7/8" O.D. x 19/32" Long
4.	GD11422	2	Upper Parallel Arm
5.	G10732	4	Hex Head Cap Screw, 5/8"-18 x 2"
	GD7805	4	Special Washer, 5/8", Hardened
	G10412	4	Lock Nut, 5/8"-18
6.	GB0186	2	Spring Anchor
7.	GD14217	2	Tab Lock Pin, 7/16" x 1 1/2"
8.	GD8249	2-4	Spring
9.		-	See “Hopper Support And Meter Drive”, Page P20
10.	GA5651	1	Lower Parallel Arm
11.	GB0366	2	Extension Bracket
12.	G10007	4	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
A.	G6325X	-	U-Bolt Package For 5" x 7" Toolbar, Includes: (2) GD1113, (4) G10230, (4) G10104

15" SEED OPENER DISC BLADE/BEARING ASSEMBLY AND SCRAPERS

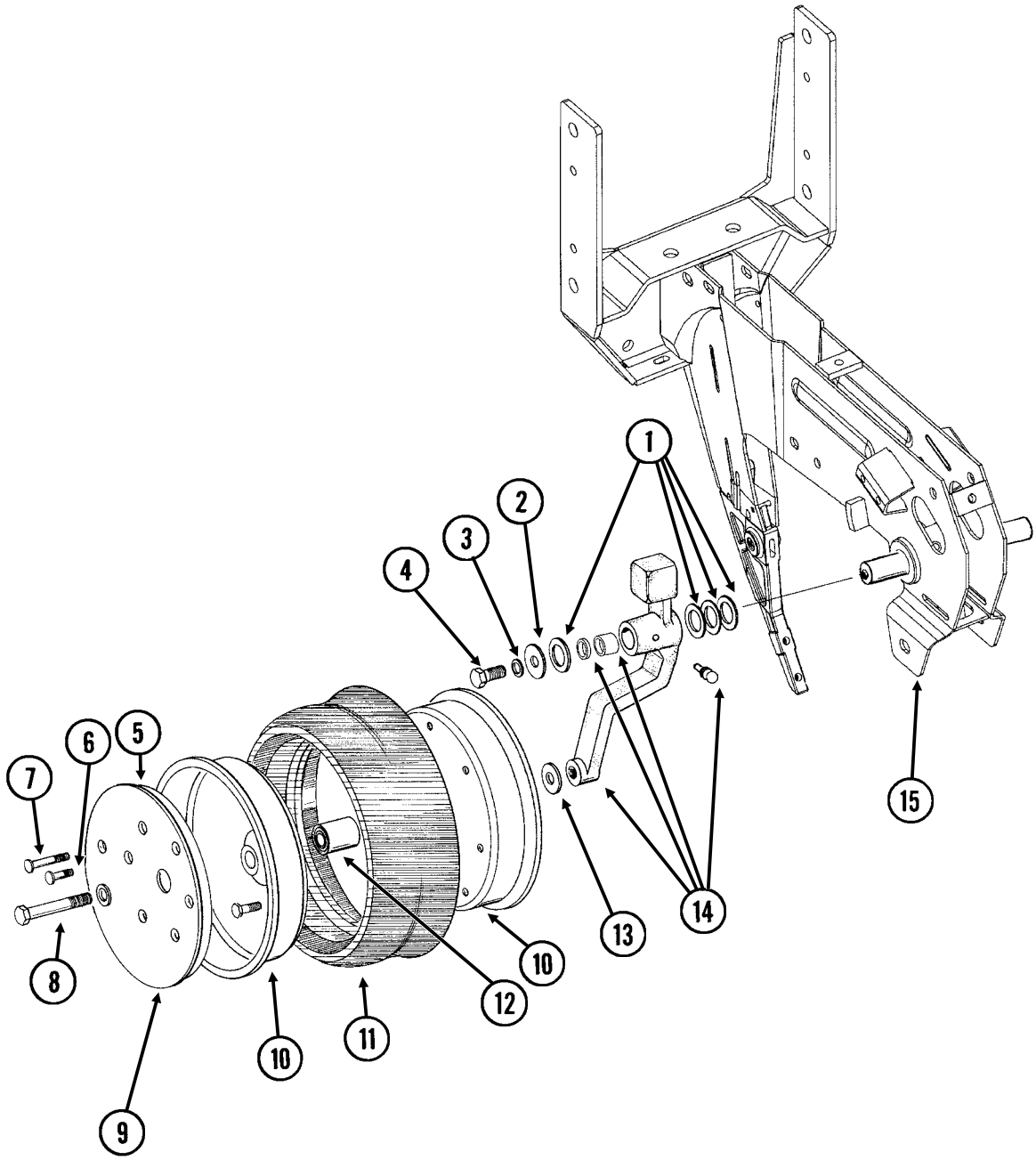
(RU139)



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10328	2	Hex Head Cap Screw, ⅜"-16 x ⅝"
	G10622	2	Serrated Flange Nut, ⅜"-16
2.	GA2012R	1	Disc Scraper, R.H.
	GA2012L	-	Disc Scraper, L.H. (Shown)
3.	G10427	12	Rivet, ¼" x ½"
4.	GD11017	1	Special Hex Head Cap Screw, ⅝"-11 x 1 ½", L.H. Threads
	G10007	1	Hex Head Cap Screw, ⅝"-11 x 1 ½"
5.	GD11845	2	Dust Cap
6.	G10204	2	Special Machine Bushing, ⅝" x 1" O.D.
7.	GD10473	2	Bearing Housing
8.	GA2014	2	Bearing
9.	GD11306	2	Disc Blade, 3.5 mm x 15"
10.	G10213	-	Machine Bushing, ⅝" (.030" Thick)(As Required)
11.		-	See “Shank Assembly”, Pages P2 And P3
12.	GB0301	1	Seed Tube Guard/Inner Scraper
13.	G10912	2	Hex Socket Head Cap Screw, 5⁄16"-18 x 1", Grade 8
14.	G10325	1	Hex Head Cap Screw, ⅜"-16 x 2 ¾"
	G10622	1	Serrated Flange Nut, ⅜"-16
15.	GD11259	1	Sleeve, ⅜" I.D. x ⅝" O.D. x 1 25⁄32" Long
A.	GA8324	-	Disc Blade/Bearing Assembly, Less Dust Cap (Items 3 And 7-9)

GAUGE WHEELS

(RU140)

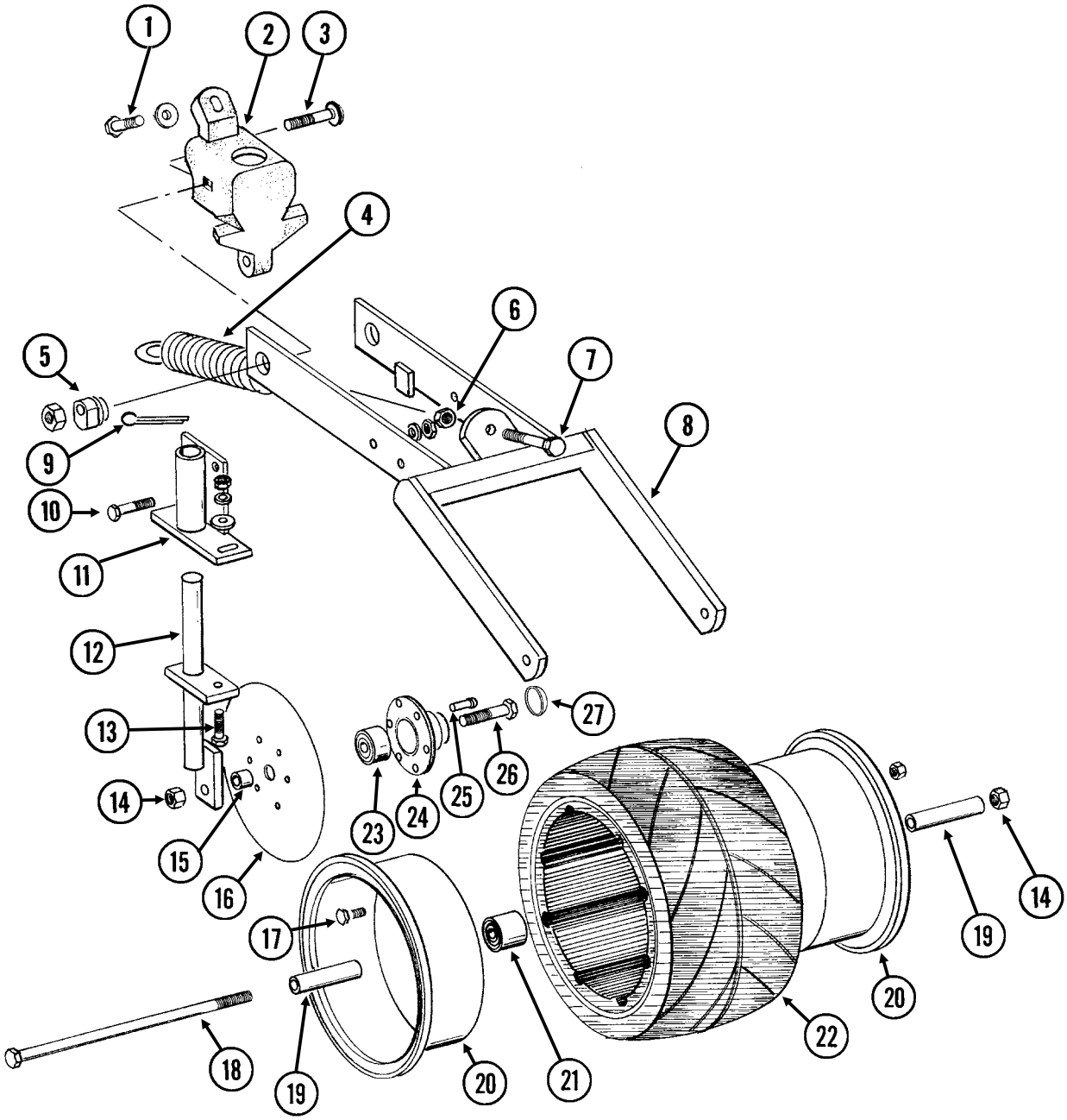


GAUGE WHEELS

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10940	-	Machine Bushing, 1" (.048" Thick)
2.	G10216	2	Washer, ½" USS
3.	G10228	2	Lock Washer, ½"
4.	G10014	1	Hex Head Cap Screw, ½"-13 x 1"
5.	GD11453	2	Cover
6.	G10338	12	Carriage Bolt, 5/16"-18 x 1 1/4"
	G10620	12	Serrated Flange Nut, 5/16"-18
7.	G10924	8	Carriage Bolt, 5/16"-18 x 1 ¾"
	G10620	8	Serrated Flange Nut, 5/16"-18
8.	G10010	2	Hex Head Cap Screw, ⅝"-11 x 3"
	G10230	2	Lock Washer, ⅝"
9.	G10018	14	Hex Head Cap Screw, 5/16"-18 x ⅝"
	G10109	14	Lock Nut, 5/16"-18, Grade 8
10.	GD11423	4	Half Wheel
11.	GD1086	2	Tire
12.	GA6171	2	Bearing
13.	G10204	2	Special Machine Bushing, ⅝" x 1" O.D.
14.	GA7975	1	Wheel Arm W/Grease Fitting, Bushings And Seals, L.H. (Shown)
	GA7976	1	Wheel Arm W/Grease Fitting, Bushings And Seals, R.H.
	G10640	1	Grease Fitting, ¼"-28 (Per Arm)
	GB0276	2	Bushing, 1" I.D. x 1 ¼" O.D. x 1" Long (Per Arm)
	GD10991	2	Seal (Per Arm)
15.		-	See “Shank Assembly”, Pages P2 And P3
A.	GA7949	-	Gauge Wheel Complete (Items 5-7 And 9-12)
B.	G1K296	-	Gauge Wheel Arm Bushing And Seal Driver Kit, Includes: (1) Seal Driver, (1) Bushing Driver, (1) Instruction

COVERING DISCS/SINGLE PRESS WHEEL

RUA054/RUB026(RU94d)

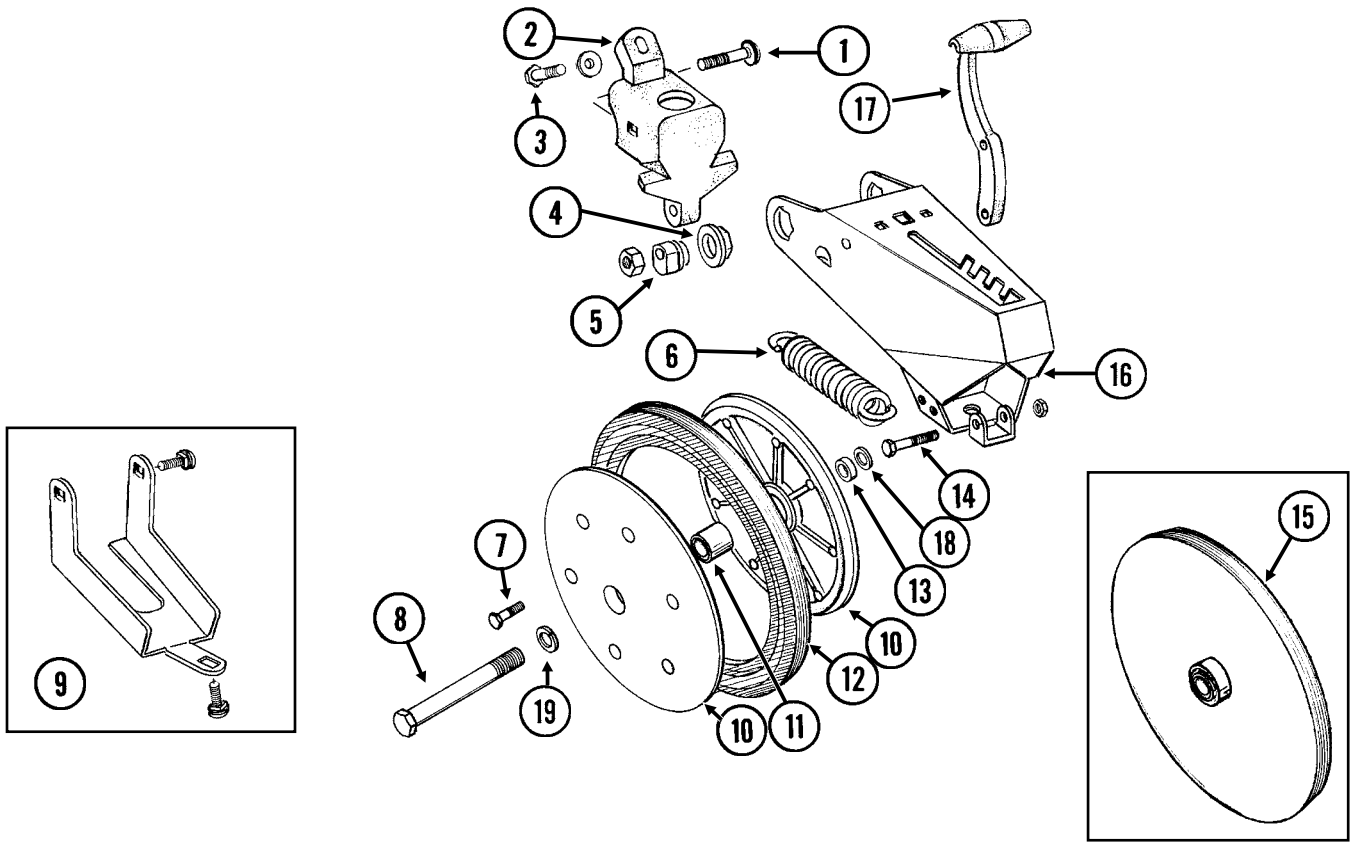


COVERING DISCS/SINGLE PRESS WHEEL

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10001	1	Hex Head Cap Screw, 3/8"-16 x 1"
	G10210	1	Washer, 3/8" USS
2.	GB0268	1	Wheel Arm Stop
3.	G10801	2	Carriage Bolt, 1/2"-13 x 2 1/4"
	G10216	2	Washer, 1/2" USS
	G10102	2	Hex Nut, 1/2"-13
4.	GA2054	1	Spring
5.	GB0239	2	Eccentric Bushing
6.	G10102	1	Hex Nut, 1/2"-13
7.	G10015	1	Adjusting Bolt, 1/2"-13 x 5"
8.	GA6619	1	Mounting Arm
9.	G10463	2	Cotter Pin, 1/4" x 1 1/2"
10.	G10171	4	Hex Head Cap Screw, 5/16"-18 x 1 1/4"
	G10232	4	Lock Washer, 5/16"
	G10106	4	Hex Nut, 5/16"-18
11.	GA6620	2	Bracket
12.	GA6618	2	Mount
13.	G10303	2	Carriage Bolt, 5/16"-18 x 1"
	G10219	2	Washer, 5/16" USS
	G10232	2	Lock Washer, 5/16"
	G10106	2	Hex Nut, 5/16"-18
14.	G10107	3	Lock Nut, 5/8"-11
15.	GD1109	2	Bushing, 41/64" I.D. x 7/8" O.D. x 1/4" Long
16.	GD9290	2	Disc Blade, 8"
17.	G10018	7	Hex Head Cap Screw, 5/16"-18 x 5/8"
	G10109	7	Lock Nut, 5/16"-18, Grade 8
18.	G10152	1	Hex Head Cap Screw, 5/8"-11 x 9"
19.	GD3180-12	2	Sleeve, 5/8" I.D. x 7/8" O.D. x 2 7/8" Long
20.	GD9562	2	Half Wheel
21.	GA6171	1	Bearing
22.	GD9305	1	Tire
23.	GA2014	2	Bearing
24.	GD10473	2	Bearing Housing
25.	G10427	12	Rivet, 1/4" x 1/2"
26.	G10006	2	Hex Head Cap Screw, 5/8"-11 x 2 1/4"
27.	GD11845	2	Dust Cap
A.	GA6733	-	Single Press Wheel Complete W/Bearing (Items 17 And 20-22)
B.	GA6801	-	Covering Disc Blade Complete W/Bearing (Items 16 And 23-25)

“V” CLOSING WHEELS

(RU83i/RU83n)

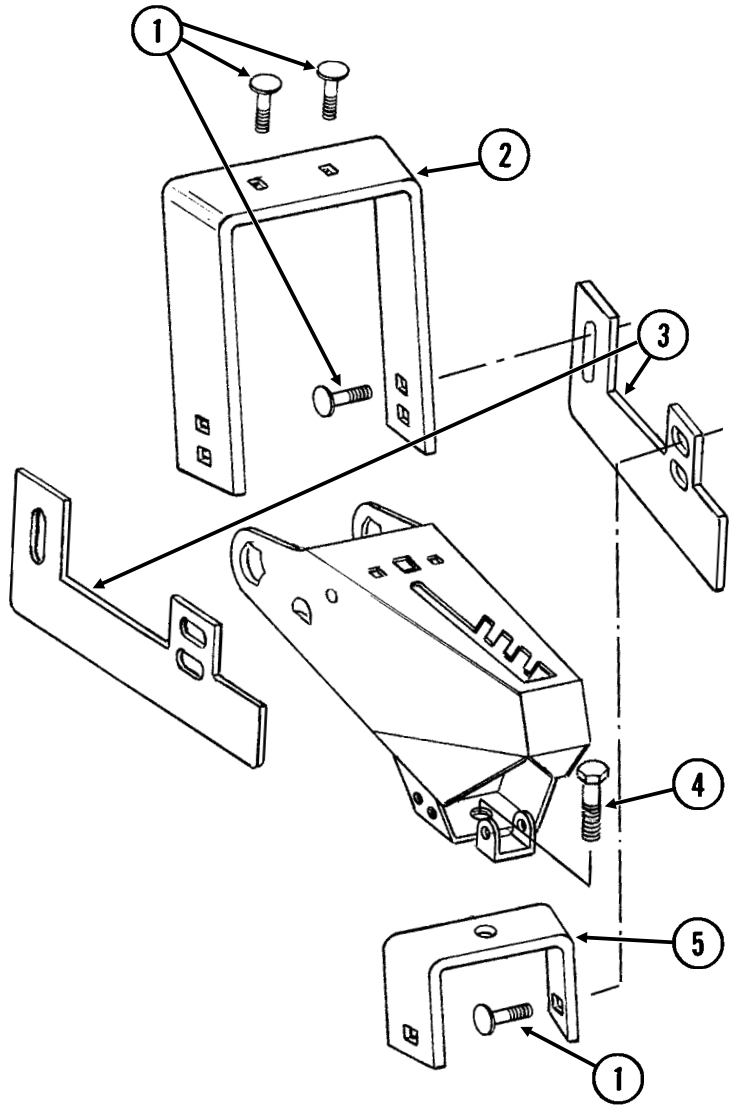


“V” CLOSING WHEELS

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10801	2	Carriage Bolt, ½"-13 x 2 ¼"
	G10111	2	Lock Nut, ½"-13
2.	GB0268	1	Wheel Arm Stop
3.	G10001	1	Hex Head Cap Screw, ⅜"-16 x 1"
	G10210	1	Washer, ⅜" USS
4.	GB0282	2	Stepped Bushing
5.	GB0239	2	Eccentric Bushing
6.	GD8460	1	Spring
7.	G10064	6	Hex Head Cap Screw, ¼"-20 x 1"
8.	G10013	2	Hex Head Cap Screw, ⅝"-11 x 3 ½"
	G10107	2	Lock Nut, ⅝"-11
9.	G1K345	-	Closing Wheel Shield Kit W/Hardware And Instruction
	G10308	2	Carriage Bolt, ⅜"-16 x ¾"
	G10599	1	Carriage Bolt, ⅜"-16 x 1 ¼"
	G10210	1	Washer, ⅜" USS
	G10229	3	Lock Washer, ⅜"
	G10101	3	Hex Nut, ⅜"-16
10.	GD9120	2	Nylon Half Wheel
11.	GA6171	1	Bearing
12.	GD1085	2	Rubber Tire, 1" x 12"
13.	GD1109	2	Bushing, 41⁄64" I.D. x ⅞" O.D. x ¼" Long
14.	G10133	1	Hex Head Cap Screw, 5⁄16"-18 x 1 ½"
	G10109	1	Lock Nut, 5⁄16"-18, Grade 8
15.	GA6597	-	Cast Iron Closing Wheel W/Bearing
	GA6171	-	Bearing
16.	GA8322	1	Arm
17.	GB0254	1	Lever
18.	GD7805	2	Special Washer, ⅝", Hardened
19.	G10230	2	Lock Washer, ⅝"
A.	GA6434	-	Rubber Closing Wheel Complete W/Bearing (Items 7 And 10-12)

DRAG CLOSING ATTACHMENT

RUB050(RU90c)

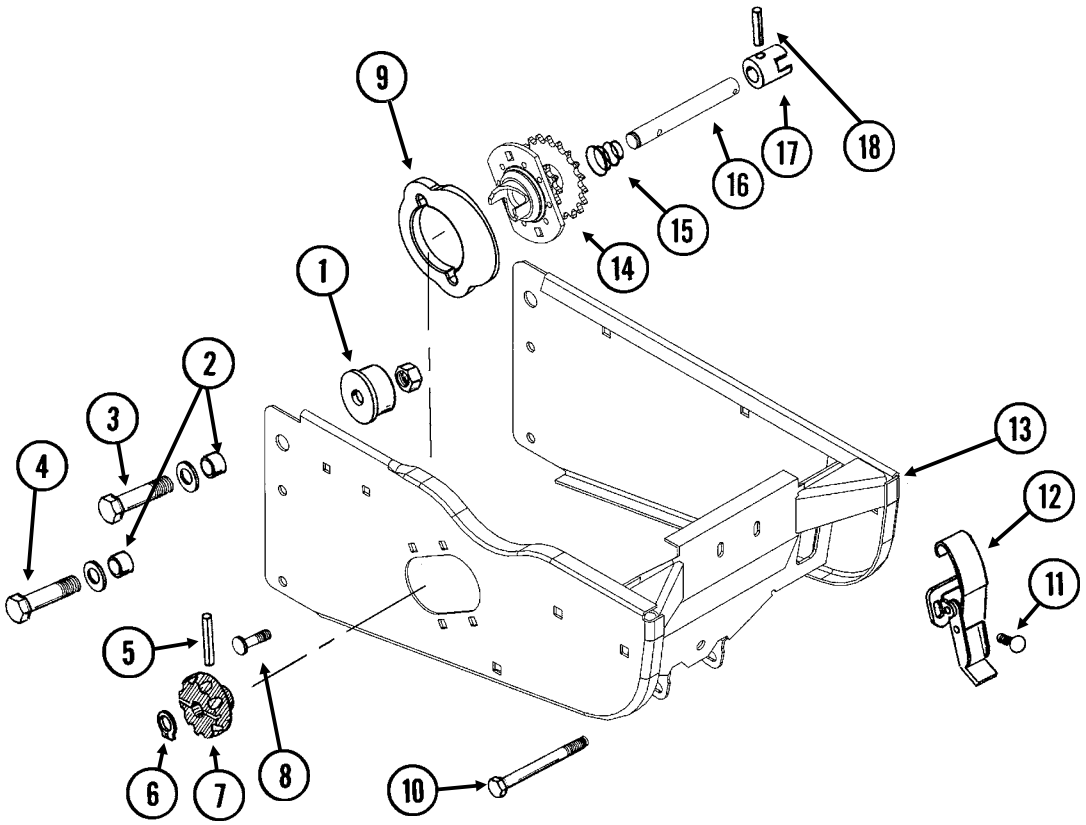


DRAG CLOSING ATTACHMENT

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10599	6	Carriage Bolt, ⅜"-16 x 1 ¼"
	G10210	6	Washer, ⅜" USS
	G10229	6	Lock Washer, ⅜"
	G10101	6	Hex Nut, ⅜"-16
2.	GD11508	1	Front Bracket
3.	GD11313	2	Blade
4.	G10007	1	Hex Head Cap Screw, ⅝"-11 x 1 ½"
	G10230	1	Lock Washer, ⅝"
	G10104	1	Hex Nut, ⅝"-11
5.	GD11509	1	Rear Bracket
A.	G7566X	-	Drag Closing Attachment Complete (Items 1-5)

HOPPER SUPPORT AND METER DRIVE

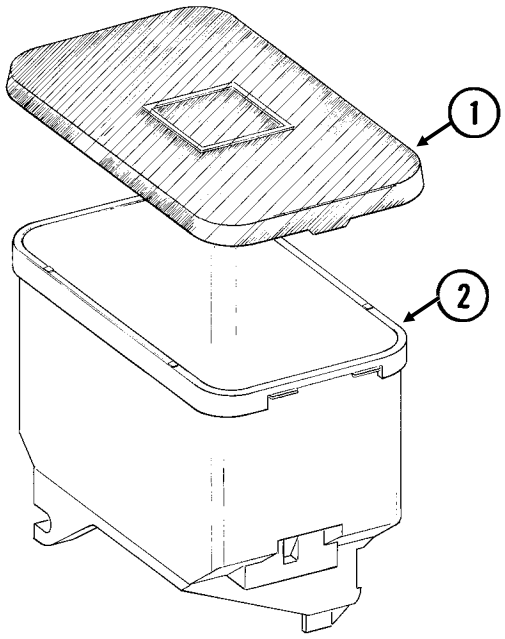
(METR22d)



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	GB0314	2	Hopper Mount
2.	GB0218	4	Bushing, 21/32" I.D. x 7/8" O.D. x 19/32" Long
3.	G10752	2	Hex Head Cap Screw, 5/8"-18 x 2 1/4"
	GD7805	2	Special Washer, 5/8", Hardened
	G10412	2	Lock Nut, 5/8"-18
4.	G10751	2	Hex Head Cap Screw, 5/8"-18 x 1 3/4"
	GD7805	2	Special Washer, 5/8", Hardened
	G10412	2	Lock Nut, 5/8"-18
5.	G10602	1	Spring Pin, 1/4" x 1 1/2"
6.	G10567	1	External Retaining Ring, 5/8"
7.	GD11239	1	Knob
8.	G10338	2	Carriage Bolt, 5/16"-18 x 1 1/4"
	G10620	2	Serrated Flange Nut, 5/16"-18
9.	GB0331	1	Clutch Adapter Plate
10.	G10061	1	Hex Head Cap Screw, 3/8"-16 x 3 1/2"
	G10210	2	Washer, 3/8" USS
	G10108	1	Lock Nut, 3/8"-16
11.	G10309	2	Carriage Bolt, 1/4"-20 x 5/8", Grade 2
	G10621	2	Serrated Flange Nut, 1/4"-20
12.	GA2007	1	Hopper Hold Down Latch
13.	GA10155	1	Hopper Support
14.	GA10137	1	Double Sprocket And Bearing, Drive Clutch, 11/19 Tooth
15.	GD11413	1	Spring
16.	GD15747	1	Shaft
17.	GB0278	1	Coupler
18.	G10546	1	Spring Pin, 3/16" x 1 1/4"
A.	GA10151	-	Meter Drive Assembly Complete, 11/19 Tooth (Items 5-7 And 14-18)

SEED HOPPER AND LID

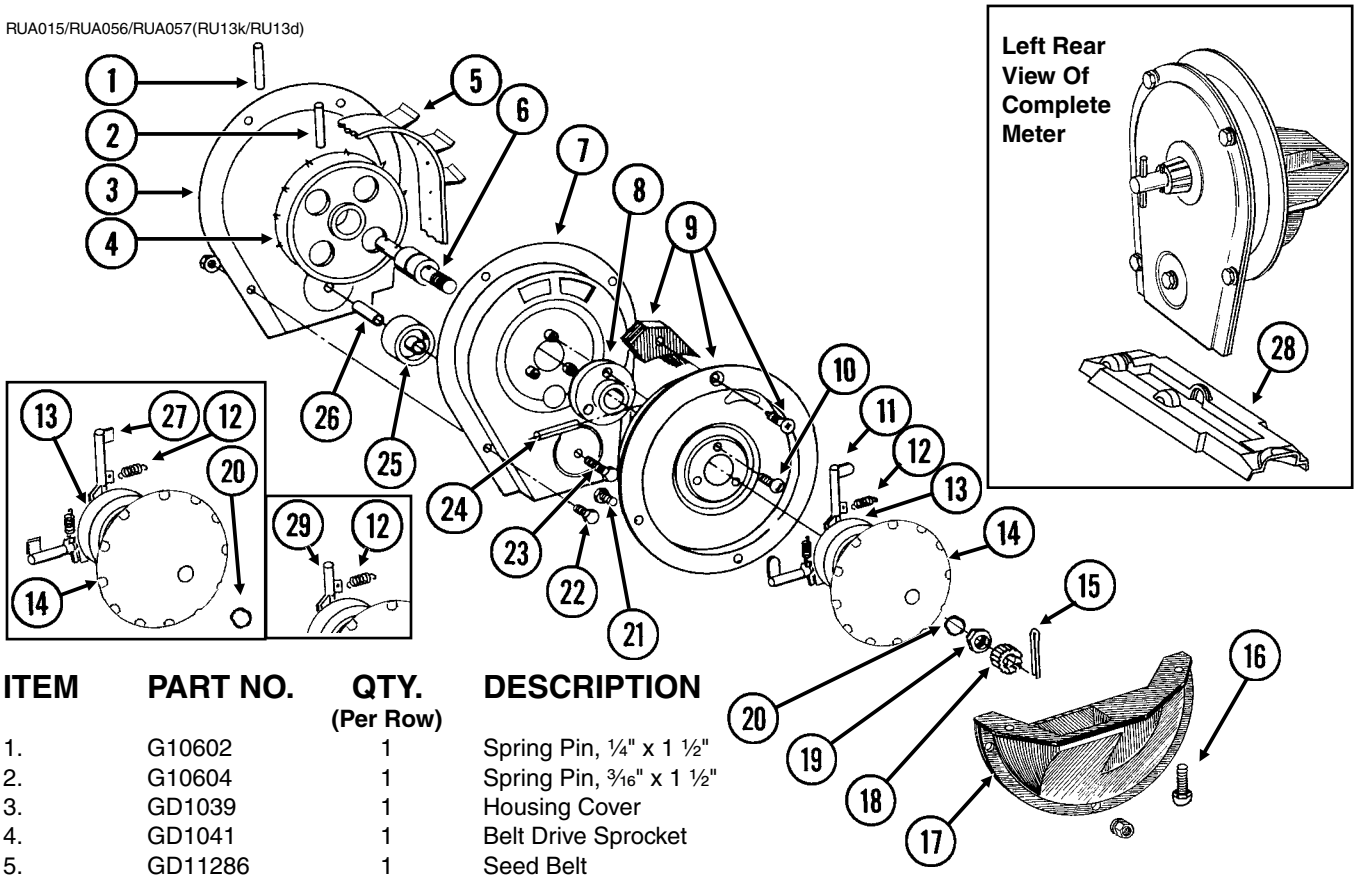
(RU87e/RU87a)



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	GD11279	1	Lid
2.	GA9714	1	Seed Hopper, Reinforced

FINGER PICKUP SEED METER

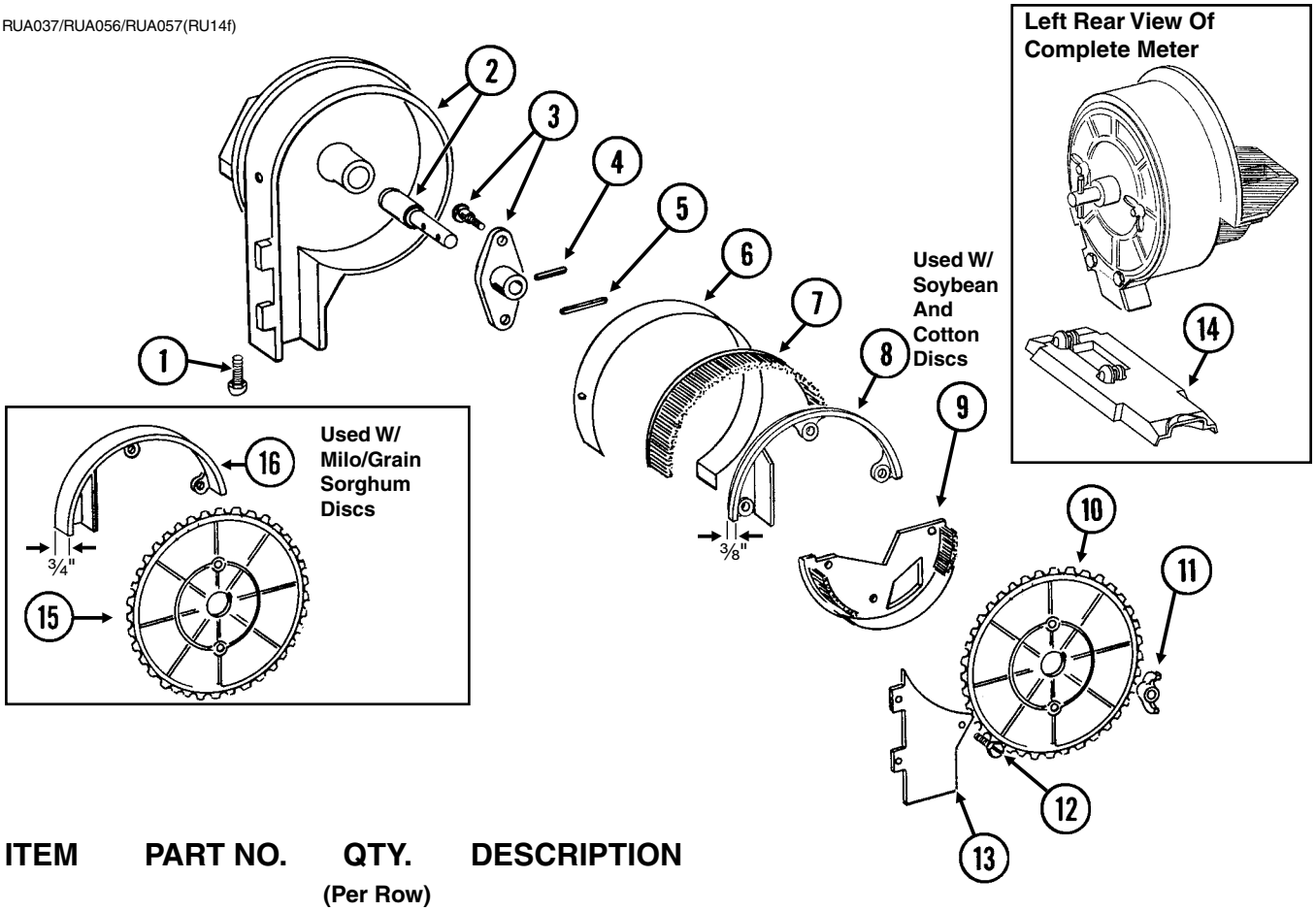
RUA015/RUA056/RUA057(RU13k/RU13d)



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10602	1	Spring Pin, ¼" x 1 ½"
2.	G10604	1	Spring Pin, 3⁄16" x 1 ½"
3.	GD1039	1	Housing Cover
4.	GD1041	1	Belt Drive Sprocket
5.	GD11286	1	Seed Belt
6.	GA2019	1	Bearing
7.	GA2018	1	Conveyor Housing
8.	GB0110	1	Bearing Housing
9.	GR1569	1	Carrier Plate W/Brush And Screw
	GA2020	-	Brush
	G10690	-	Rolling Thread Screw, No. 10 x ¾"
10.	G10401	3	Slotted Hex Washer Head Screw, No. 10-32 x ⅝"
11.	GD10733	12	Finger, Corn
12.	GD6501	12	Spring
13.	GB0111	1	Cam
14.	GD11528	1	Finger Holder
15.	G10470	1	Cotter Pin, 5⁄32" x 1"
16.	G11009	2	Locking Thumbscrew, 5⁄16"-18 x ¾"
17.	GD11311	1	Seed Baffle
18.	GD1083	1	Cover Nut
19.	G10500	1	Jam Nut, ⅝"-18 UNF
20.	GA8343	1	Wave Washer, ⅝" (Triple Wave)
21.	G10020	3	Hex Head Cap Screw, ¼"-20 x ⅝"
	G10323	3	Hex Flange Nut, ¼"-20, No Serrations
22.	G10022	4	Hex Head Cap Screw, ¼"-20 x ½"
	G10621	4	Serrated Flange Nut, ¼"-20
23.	G10021	1	Hex Head Cap Screw, ¼"-20 x 1 ½"
	G10621	1	Serrated Flange Nut, ¼"-20
24.	G10603	1	Spring Pin, ¼" x 1 ¼"
25.	GD1042	1	Idler
26.	GB0120	1	Bushing, 17⁄64" I.D. x 1 1⁄32" Long
27.	GD10226	12	Finger, Oil Sunflower
28.	GD15698	1	Shank Cover, Finger Pickup Seed Meter
29.	GD11787	-	Half Rate Blank Finger
A.	GR1487	-	Finger Assembly, Corn (Items 11-14 And 20)
B.	GR1327	-	Finger Assembly, Oil Sunflower (Items 12-14, 20 And 27)

BRUSH-TYPE SEED METER

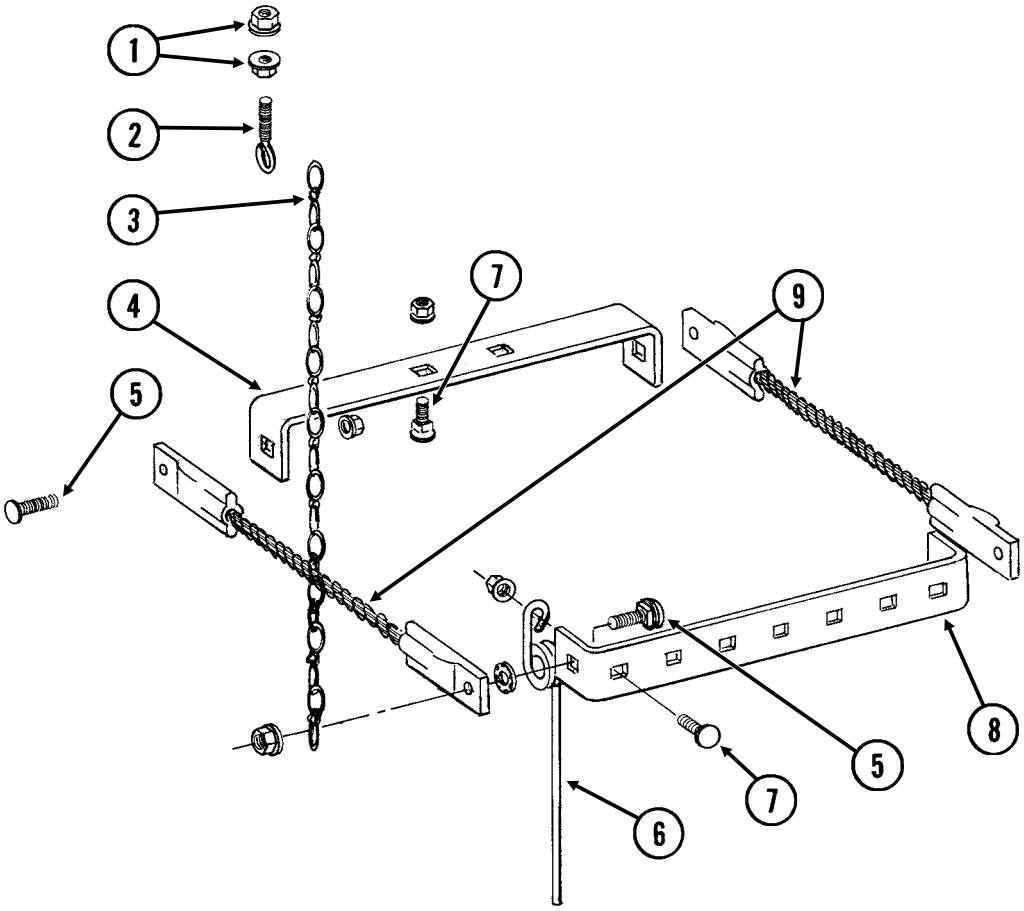
RUA037/RUA056/RUA057(RU14f)



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G11009	2	Locking Thumbscrew, 5/16"-18 x 3/4"
2.	GA6027	1	Housing W/Bearing
	GA5698	-	Bearing
3.	GA6038	1	Hub W/Shoulder Bolts
	GD1755	-	Shoulder Bolt, 1/4"-20 (2 Used)
4.	G10603	1	Spring Pin, 1/4" x 1 1/4"
5.	G10602	1	Spring Pin, 1/4" x 1 1/2"
6.	GD8778	1	Wear Strip
7.	GA5699	1	Upper Brush
8.	GD11122	1	Upper Brush Retainer (Used W/Soybean And Cotton Discs)
9.	GA5834	1	Lower Brush
10.	GA5794	-	Seed Disc, Soybean, 60 Cell, Black Color-Coded
	GA6184	-	Seed Disc, Specialty Soybean, 48 Cell, Dark Blue Color-Coded
	GA5796	-	Seed Disc, Cotton, Acid-Delinted, 30 Cell, White Color-Coded
	GA6168	-	Seed Disc, Large Cotton, Acid-Delinted, 36 Cell, Tan Color-Coded
	GA6478	-	Seed Disc, High-Rate Cotton, Acid-Delinted, 48 Cell, Light Green Color-Coded
	GA6182	-	Seed Disc, Hill-Drop Cotton, Acid-Delinted, 12 Cell, Brown Color-Coded
	GA7255	-	Seed Disc, Small Hill-Drop Cotton, Acid-Delinted, 12 Cell, Dark Green Color-Coded
11.	G10531	2	Wing Nut W/Nylon Insert, 1/4"-20
12.	G11151	9	Hex Washer Head Screw, No. 10-24 x 1/2"
	G10634	-	Slotted Tap Screw, No. 10-24 x 5/8" (Use As Required)
13.	GD7878	1	Cover
14.	GD15699	1	Shank Cover, Brush-Type Seed Meter
15.	GA5982	-	Seed Disc, Small Milo/Grain Sorghum, 30 Cell, Red Color-Coded
	GA6187	-	Seed Disc, Large Milo/Grain Sorghum, 30 Cell, Light Blue Color-Coded
	GA5795	-	Seed Disc, High-Rate Small Milo/Grain Sorghum, 60 Cell, Red Color-Coded
	GA6633	-	Seed Disc, High-Rate Large Milo/Grain Sorghum, 60 Cell, Yellow Color-Coded
16.	GD8237	-	Upper Brush Retainer (Used W/Milo/Grain Sorghum Discs)

SPRING TOOTH INCORPORATOR

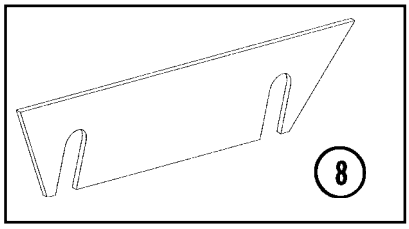
RUA055(RU95)

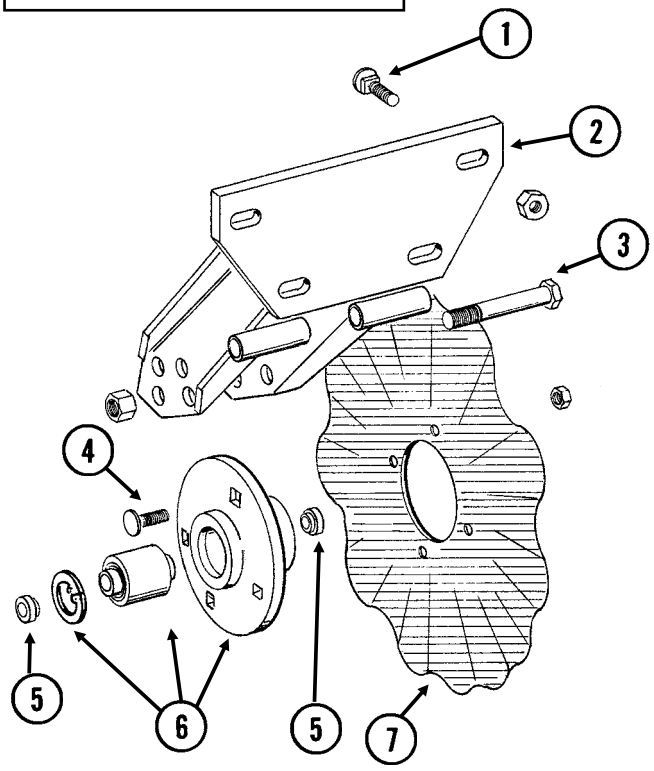


ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10621	4	Serrated Flange Nut, ¼"-20
2.	GD2460	2	Eyebolt, ¼"-20
3.	G3305-01	4	Twin Loop Chain, 9 Links
4.	GD1143	1	Front Bracket
5.	G10305	4	Carriage Bolt, ⅜"-16 x 1"
	G10529	4	External Tooth Lock Washer, ⅜"
	G10622	4	Serrated Flange Nut, ⅜"-16
6.	GD1145	7	Spring Tooth
7.	G10308	9	Carriage Bolt, ⅜"-16 x ¾"
	G10622	9	Serrated Flange Nut, ⅜"-16
8.	GD1144	1	Rear Bracket
9.	GA2094	2	Cable Assembly

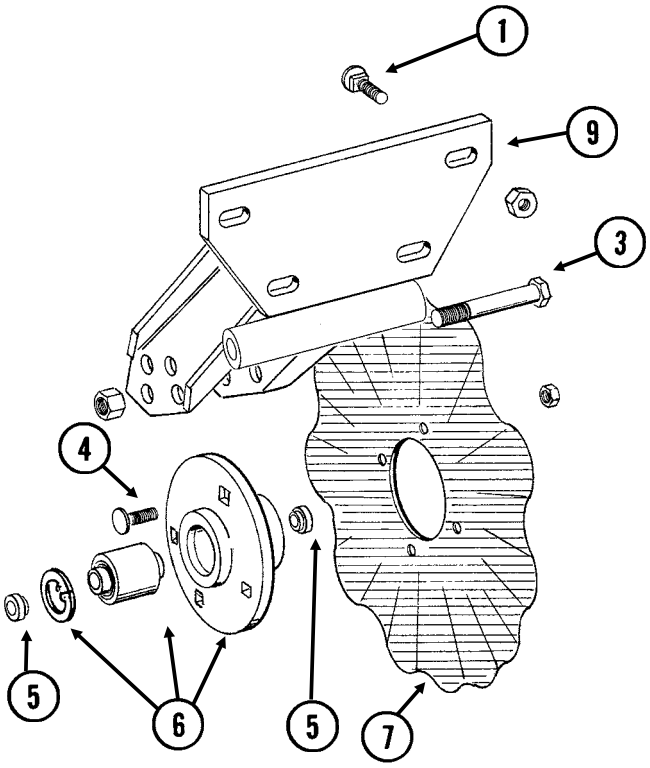
ROW UNIT MOUNTED NO TILL COULTER

(D14398/RU102c/RU152)





STYLE A

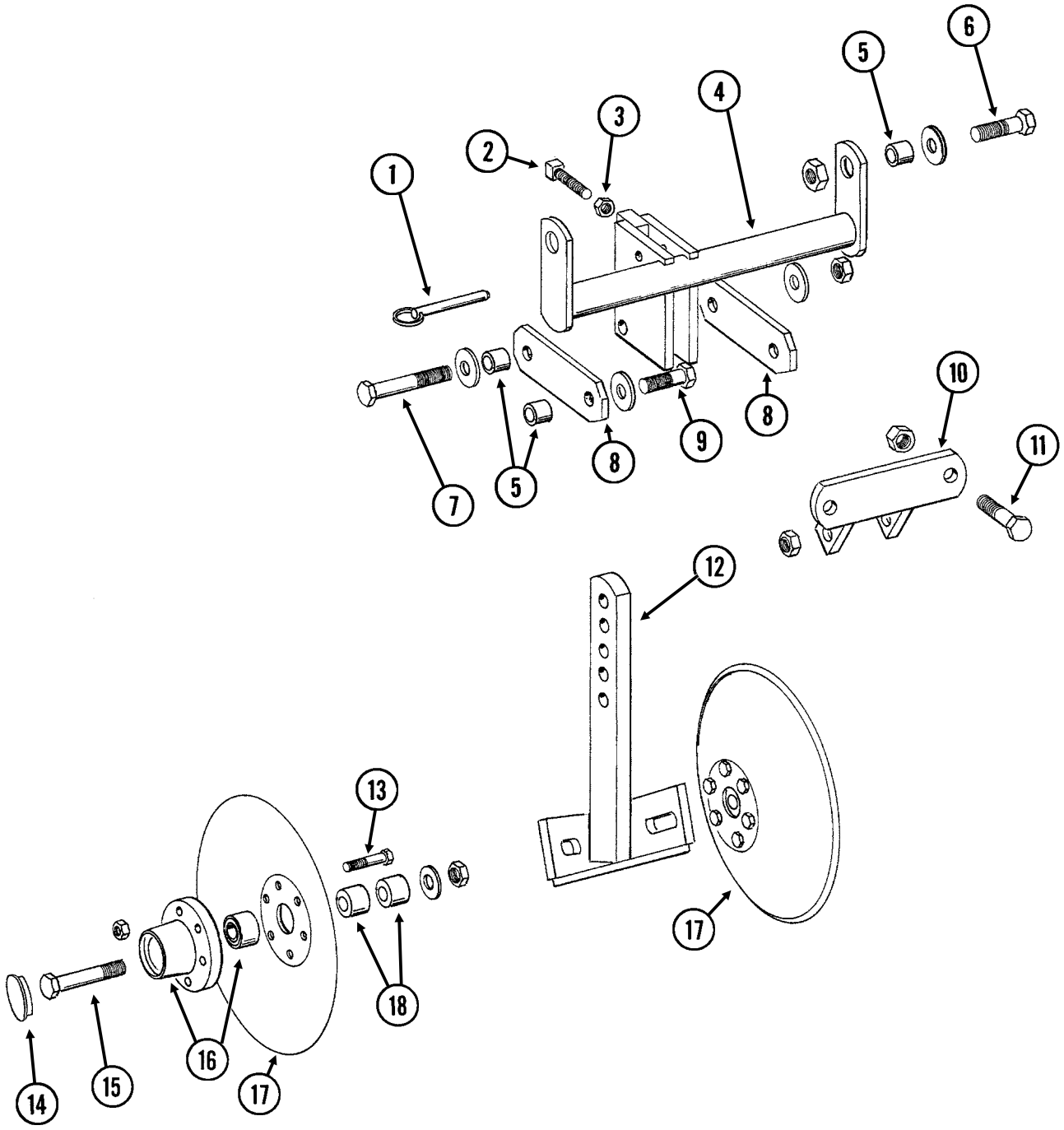


STYLE B

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10574	4	Carriage Bolt, ½"-13 x 1 ¼"
	G10111	4	Lock Nut, ½"-13
2.	GA5625	1	Arm (Style A)
3.	G10036	1	Hex Head Cap Screw, ⅝"-11 x 4"
	G10107	1	Lock Nut, ⅝"-11
4.	G10574	4	Carriage Bolt, ½"-13 x 1 ¼"
	G10111	4	Lock Nut, ½"-13
5.	GD11677	2	Adapter
6.	GA8641	1	Hub W/Bearing And Retaining Ring
	GA8603	-	Double Row Bearing
	GD11652	-	Retaining Ring, 2 7⁄16"
7.	GD7803	-	Disc Blade, Fluted, 1", 8 Flutes (Shown)
	GD7804	-	Disc Blade, Bubbled, 1"
	GD9254	-	Disc Blade, Fluted, ¾", 13 Flutes
8.	GD14398	-	Spacer
9.	GA11520	1	Arm (Style B)

ROW UNIT MOUNTED DISC FURROWER

RUA059/RUA058(RU99/RU98g)

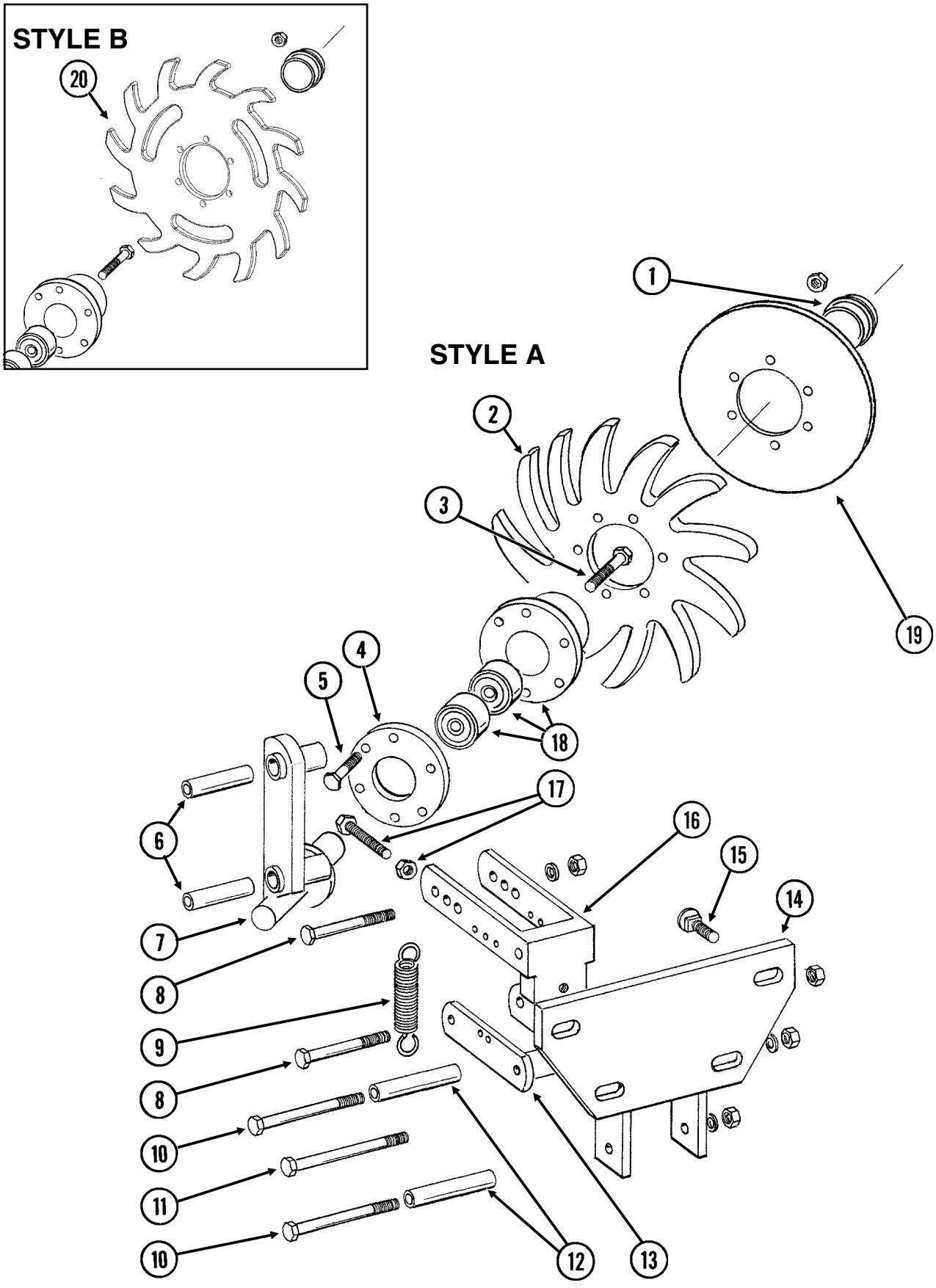


ROW UNIT MOUNTED DISC FURROWER

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10536	1	Detent Pin, ½" x 2 ½" Grip
2.	G10597	1	Square Head Set Screw, ⅝"-11 x 2 ¼"
3.	G10503	1	Hex Jam Nut, ⅝"-11, Grade 2
4.	GA5719	1	Mounting Bracket
5.	GD7889	6	Bushing, 1" O.D. x 9⁄16" I.D. x 7⁄16" Long
6.	G10039	2	Hex Head Cap Screw, ½"-13 x 1 ¾"
	GD14674	2	Special Washer, ½", Hardened
	G10111	2	Lock Nut, ½"-13
7.	G10585	1	Hex Head Cap Screw, ½"-13 x 3 ¼"
	G10216	2	Washer, ½" USS
	G10111	1	Lock Nut, ½"-13
8.	GD7890	2	Link
9.	G10017	2	Hex Head Cap Screw, ½"-13 x 1 ½"
	G10216	2	Washer, ½" USS
	G10111	2	Lock Nut, ½"-13
10.	GA5715	1	Anchor
11.	G10017	2	Hex Head Cap Screw, ½"-13 x 1 ½"
	G10111	2	Lock Nut, ½"-13
12.	GA5718	1	Support Arm
13.	G10572	6	Truss Head Slotted Machine Screw, 5⁄16"-18 x ⅞"
	G10106	6	Hex Nut, 5⁄16"-18
14.	GD1132	2	Dust Cap
15.	G10318	2	Hex Head Cap Screw, ⅝"-11 x 4 ½"
	GD7805	2	Special Washer, ⅝", Hardened
	G10107	2	Lock Nut, ⅝"-11
16.	GA5654	2	Hub W/Bearings
	GA2014	-	Bearing
17.	GD7823	-	Disc Blade, Solid, 12" (Shown)
	GD8307	-	Disc Blade, Notched, 12"
18.	GD7817-01	2	Spacer, 11⁄16" I.D. x ¾" Long
	GD7817-04	2	Spacer, 11⁄16" I.D. x ½" Long

ROW UNIT MOUNTED RESIDUE WHEEL

(RU103dd/RU103d)



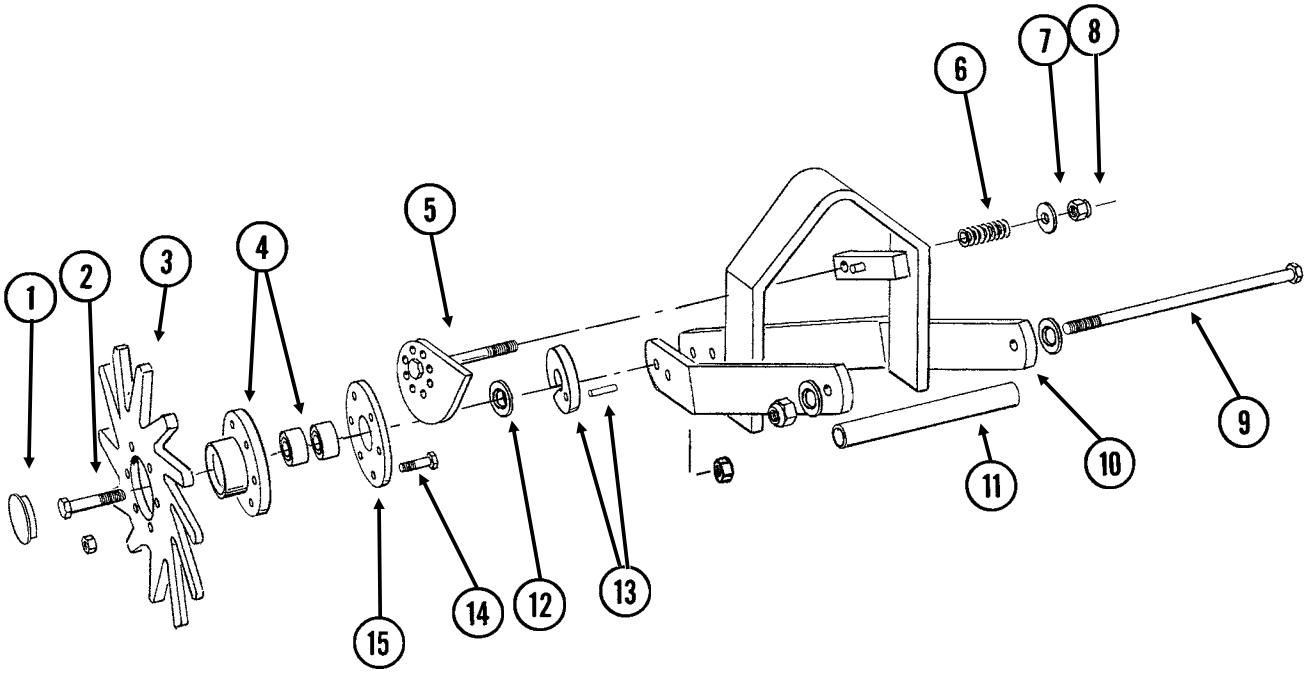
ROW UNIT MOUNTED RESIDUE WHEEL

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	GD1132	1	Dust Cap
2.	GD10552	1	Wheel, 12 Tine, ⅜" x 12"
3.	G10006	1	Hex Head Cap Screw, ⅝"-11 x 2 ¼"
4.	GD9724	1	Backing Plate
5.	G10133	6	Hex Head Cap Screw, 5⁄16"-18 x 1 ½"
	G10109	6	Lock Nut, 5⁄16"-18, Grade 8
6.	GD9720	2	Spacer, ½" x 2 3⁄16" Long
7.	GA6838	1	Wheel Mount
8.	G10033	2	Hex Head Cap Screw, ½"-13 x 3 ½"
	G10228	2	Lock Washer, ½"
	G10102	2	Hex Nut, ½"-13
9.	GD5857	2	Spring
10.	G10045	2	Hex Head Cap Screw, ½"-13 x 4 ½"
	G10228	2	Lock Washer, ½"
	G10102	2	Hex Nut, ½"-13
11.	G10348	1	Hex Head Cap Screw, ½"-13 x 5" (Lockup Bolt)
	G10111	1	Lock Nut, ½"-13
12.	GD9715	2	Spacer, ½" x 3" Long
13.	GA6834	1	Lower Link
14.	GA6832	1	Mount
15.	G10574	4	Carriage Bolt, ½"-13 x 1 ¼"
	G10111	4	Lock Nut, ½"-13
16.	GA6833	1	Upper Link
17.	G10371	1	Hex Head Cap Screw, ½"-13 x 3", Full Thread
	G10501	1	Hex Jam Nut, ½"-13, Grade 2
18.	GA5654	1	Hub W/Bearings
	GA2014	-	Bearing
19.	GD12534	-	Cover
20.	GB0387	1	Wheel, 12 Tine, ⅜" x 12"
A.	GA7446	-	Wheel Assembly, 12 Tine (Items 2, 4, 5 And 18)
B.	GA12236	-	Wheel Assembly, 12 Tine, R.H. (Items 4, 5, 18 And 20)

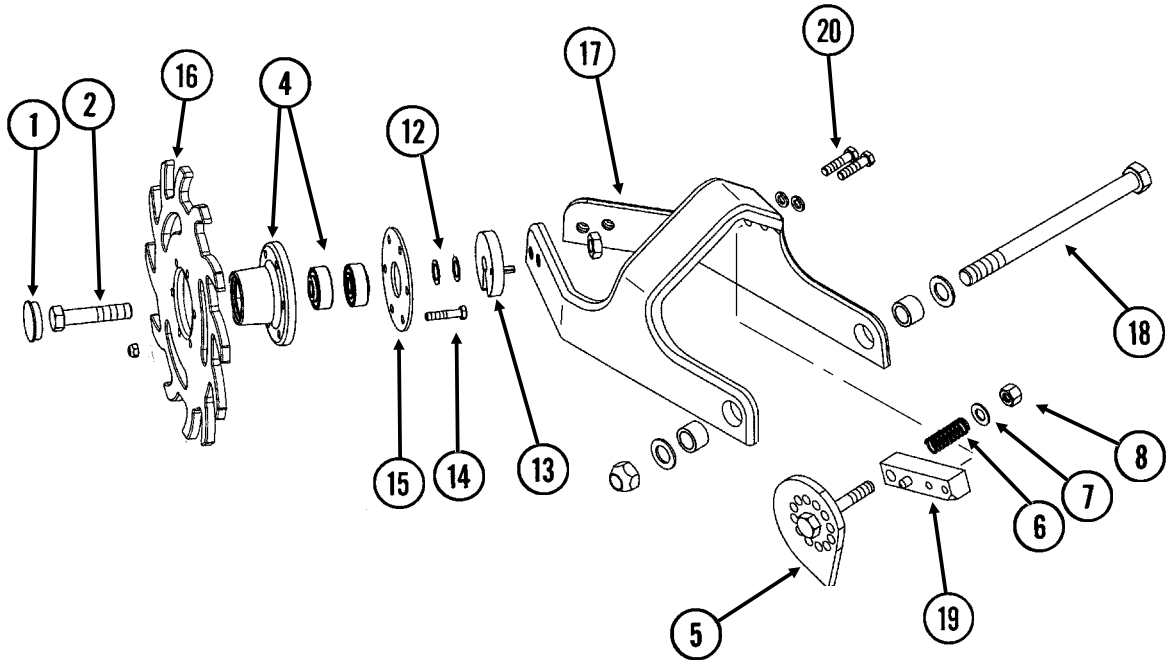
COULTER MOUNTED RESIDUE WHEELS

(RU104uuu/RU153)

STYLE A - Used With Style A Row Unit Mounted No Till Coulter



STYLE B - Used With Style B Row Unit Mounted No Till Coulter

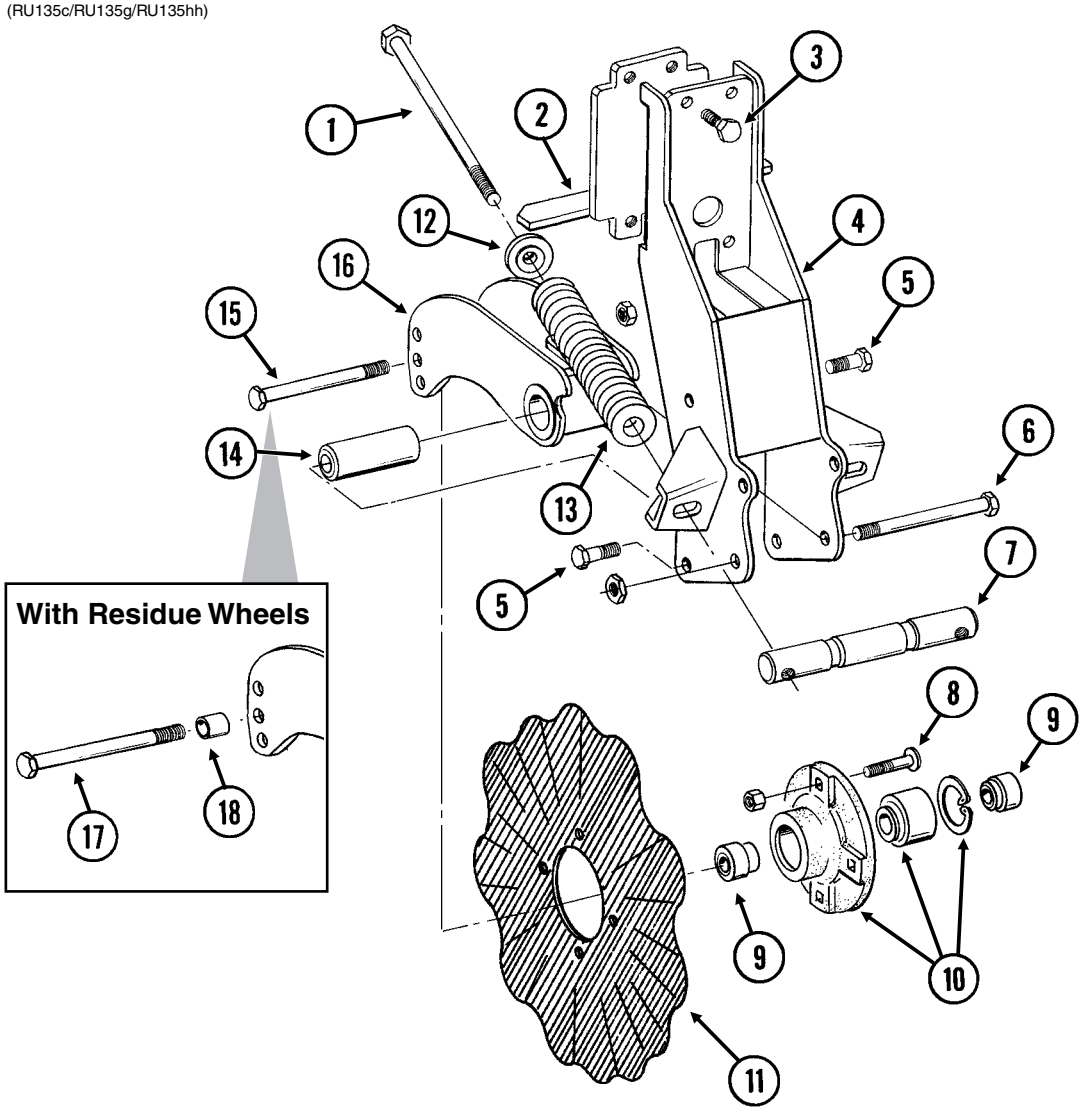


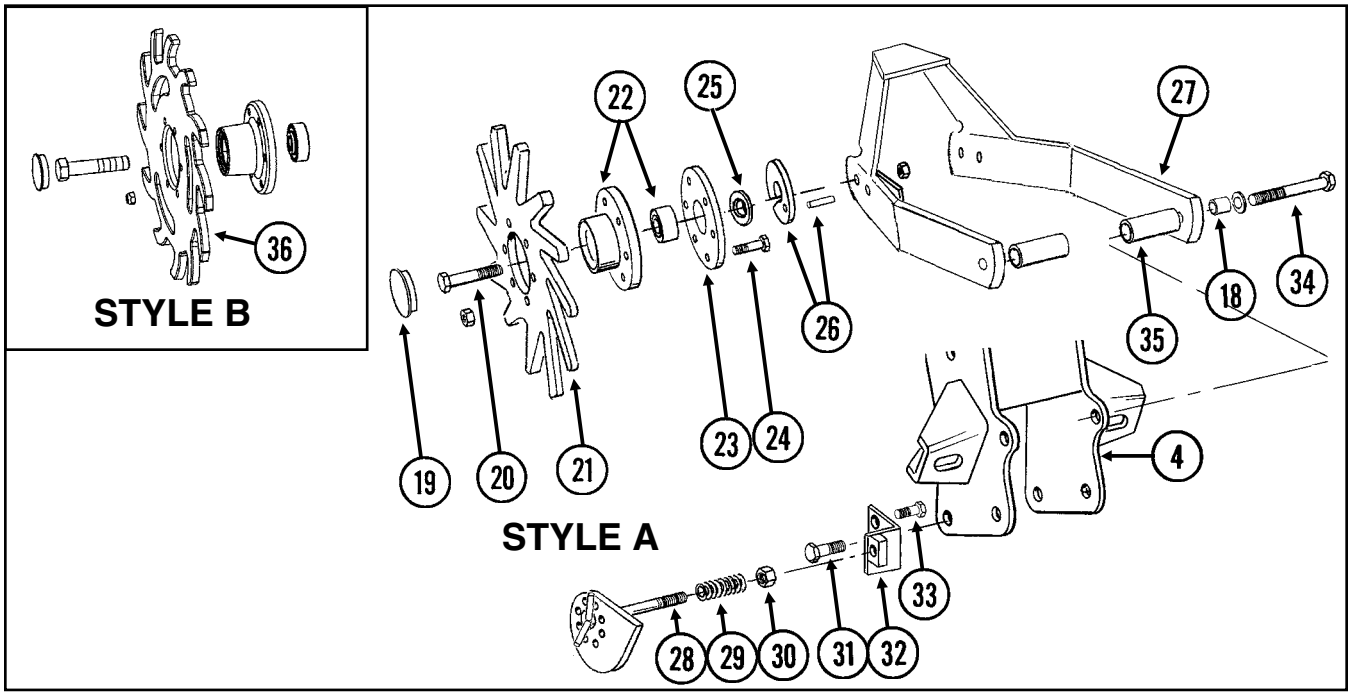
COULTER MOUNTED RESIDUE WHEELS

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	GD1132	2	Dust Cap
2.	G10010	2	Hex Head Cap Screw, 5/8"-11 x 3"
	G10503	2	Hex Jam Nut, 5/8"-11, Grade 2
3.	GD10552	2	Wheel, 12 Tine, 3/8" x 12"
4.	GA5654	2	Hub W/Bearings
	GA2014	-	Bearing
5.	GA7412	1	Cam
6.	GD10519	1	Spring
7.	G10206	1	Washer, 1/2" SAE
8.	G10974	1	Lock Nut W/Nylon Insert, 1/2"-13
9.	G11098	1	Hex Head Cap Screw, 1/2"-13 x 9 1/2", Grade 8
	GD14674	2	Special Washer, 1/2", Hardened
	G10974	1	Lock Nut W/Nylon Insert, 1/2"-13
10.	GA7271	1	Mount
11.	GD10526	1	Sleeve, 7 1/2"
12.	G10213	2-4	Machine Bushing, 5/8" (.030" Thick)
13.	GA8760	2	Weed Guard W/Spring Pin
	G10765	-	Spring Pin, 1/4" x 1"
14.	G10133	12	Hex Head Cap Screw, 5/16"-18 x 1 1/2"
	G10109	12	Lock Nut, 5/16"-18, Grade 8
15.	GD9724	2	Backing Plate
16.	GB0387	2	Wheel, 12 Tine, 3/8" x 12"
17.	GB0401	1	Mount
18.	G11236	1	Hex Head Cap Screw, 3/4"-10 x 10 1/2"
	GB0383	2	Bushing, 1 1/8" O.D. x 25/32" I.D. x 3/4" Long
	G10194	2	Washer, 3/4" SAE
	G11228	1	Lock Nut, 3/4"-10
19.	GA12256	1	Locking Pin
20.	G10003	2	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G10229	2	Lock Washer, 3/8"
A.	GA7446	-	Wheel Assembly, 12 Tine, R.H. (Items 3, 4, 14 And 15) (Shown)
	GA7445	-	Wheel Assembly, 12 Tine, L.H. (Items 3, 4, 14 And 15)
B.	GA12236	-	Wheel Assembly, 12 Tine, R.H. (Items 4, 14, 15 And 16) (Shown)
	GA12235	-	Wheel Assembly, 12 Tine, L.H. (Items 4, 14, 15 And 16)

FRAME MOUNTED COULTER W/RESIDUE WHEELS

(RU135c/RU135g/RU135hh)





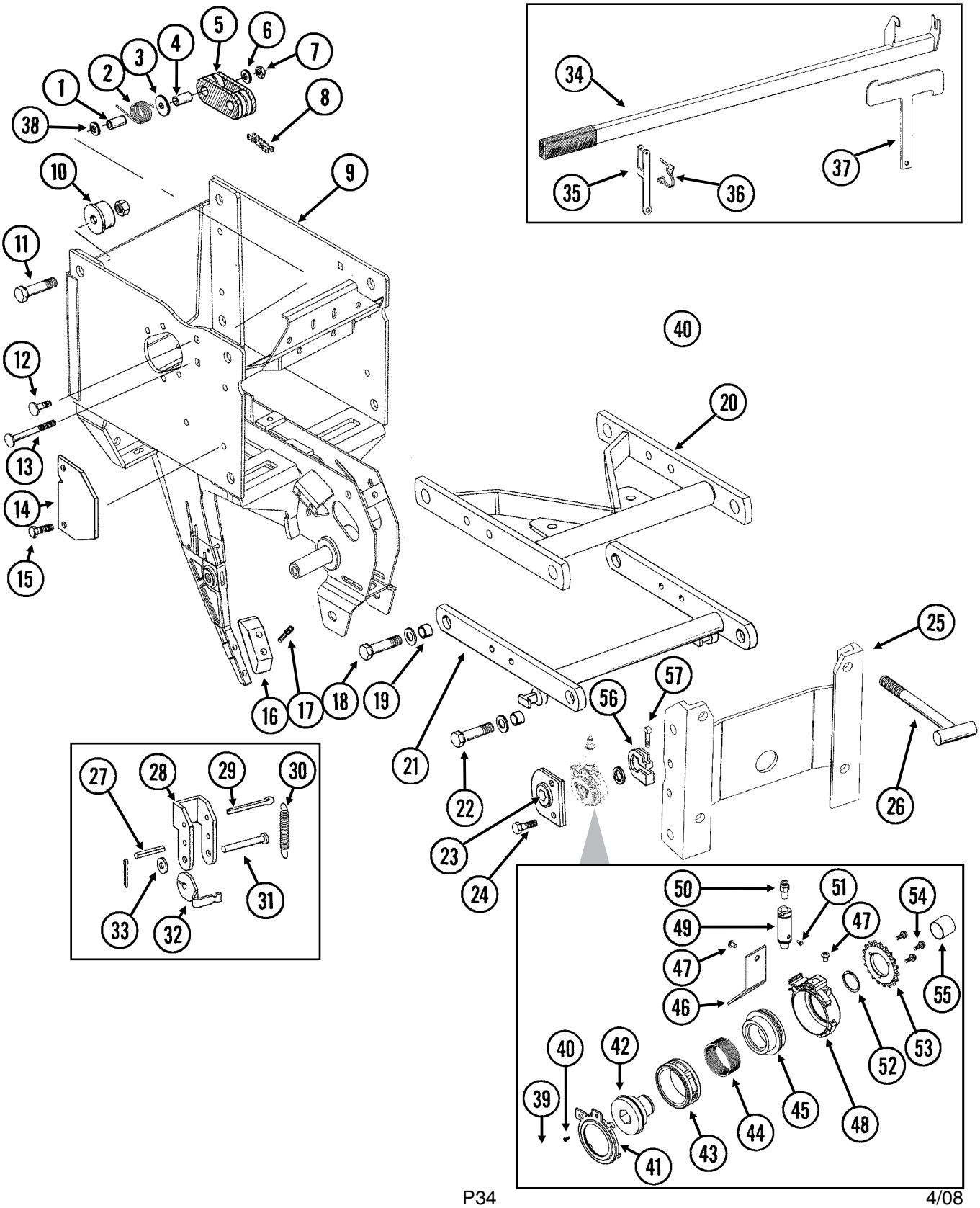
FRAME MOUNTED COULTER W/RESIDUE WHEELS

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G11010	2	Hex Head Cap Screw, ¾"-10 x 12"
2.	GA9844	1	Plate W/Angle
3.	G10039	4	Hex Head Cap Screw, ½"-13 x 1 ¾"
4.	GA9131	1	Coulter Frame
5.	G10007	4	Hex Head Cap Screw, ⅝"-11 x 1 ½"
	G10107	4	Lock Nut, ⅝"-11
6.	G10400	1	Hex Head Cap Screw, ¾"-10 x 6 ½"
	G10112	1	Lock Nut, ¾"-10
7.	GD12826	1	Spring Anchor Bar
8.	G10574	4	Carriage Bolt, ½"-13 x 1 ¼"
	G10111	4	Lock Nut, ½"-13
9.	GD12827	2	Adapter
10.	GA8641	1	Hub W/Bearing And Retaining Ring
	GA8603	1	Double Row Bearing
	GD11652	1	Retaining Ring, 2 7⁄16"
11.	GD7803	1	Disc Blade, Fluted, 1", 8 Flutes (Shown)
	GD7804	-	Disc Blade, Bubbled, 1"
	GD9254	-	Disc Blade, Fluted, ¾", 13 Flutes
12.	GB0213	2	Spring Seat
13.	GD12817	2	Compression Spring
14.	GD12829	1	Sleeve
15.	G10046	1	Hex Head Cap Screw, ⅝"-11 x 5"
	G10107	1	Lock Nut, ⅝"-11
16.	GA9845	1	Coulter Arm W/Grease Fitting
	G10643	-	Grease Fitting, 45°, ¼"-28
17.	G10011	1	Hex Head Cap Screw, ⅝"-11 x 5 ½"
	G10107	1	Lock Nut, ⅝"-11
18.	GB0218	3	Bushing, 21⁄32" I.D. x ⅞" O.D. x 19⁄32" Long
19.	GD1132	2	Dust Cap
20.	G10010	2	Hex Head Cap Screw, ⅝"-11 x 3"
	G10503	2	Hex Jam Nut, ⅝"-11, Grade 2
21.	GD10552	2	Wheel, 12 Tine, ⅜" x 12"
22.	GA5654	2	Hub W/Bearings
	GA2014	-	Bearing
23.	GD9724	2	Backing Plate
24.	G10133	12	Hex Head Cap Screw, 5⁄16"-18 x 1 ½"
	G10109	12	Lock Nut, 5⁄16"-18, Grade 8
25.	G10213	2	Machine Bushing, ⅝" (.030" Thick)
26.	GA9862	2	Weed Guard W/Spring Pin
	G10765	-	Spring Pin, ¼" x 1"
27.	GA9865	1	Mount
28.	GA9861	1	Cam
29.	GD10519	1	Spring
30.	G10974	1	Lock Nut W/Nylon Insert, ½"-13
31.	G10005	1	Hex Head Cap Screw, ⅝"-11 x 1 ¾"
	G10107	4	Lock Nut, ⅝"-11
32.	GA9864	1	Support
33.	G10014	1	Hex Head Cap Screw, ½"-13 x 1"
	G10102	1	Hex Nut, ½"-13
34.	G10011	2	Hex Head Cap Screw, ⅝"-11 x 5 ½"
	G10205	2	Washer, ⅝" SAE
	G10730	2	Lock Nut W/Nylon Insert, ⅝"-11
35.	GD14170	2	Sleeve, 3"
36.	GB0386	2	Wheel, 12 Tine, ⅜" x 12"
A.	GA7446	-	Wheel Assembly, 12 Tine, R.H. (Items 21-24) (Shown)
	GA7445	-	Wheel Assembly, 12 Tine, L.H. (Items 21-24)
B.	GA12236	-	Wheel Assembly, 12 Tine, R.H. (Items 22, 23, 24 And 36) (Shown)
	GA12235	-	Wheel Assembly, 12 Tine, L.H. (Items 22, 23, 24 And 36)

INTERPLANT® PUSH ROW UNIT

(RU156c/RU141h)

NOTE: Push row units use the same seed tube, row unit depth adjustment components, quick adjustable down force springs, 15" opener disc blades, gauge wheels, closing wheels, meter drive and seed hopper as the pull row unit. See those pages for common parts.

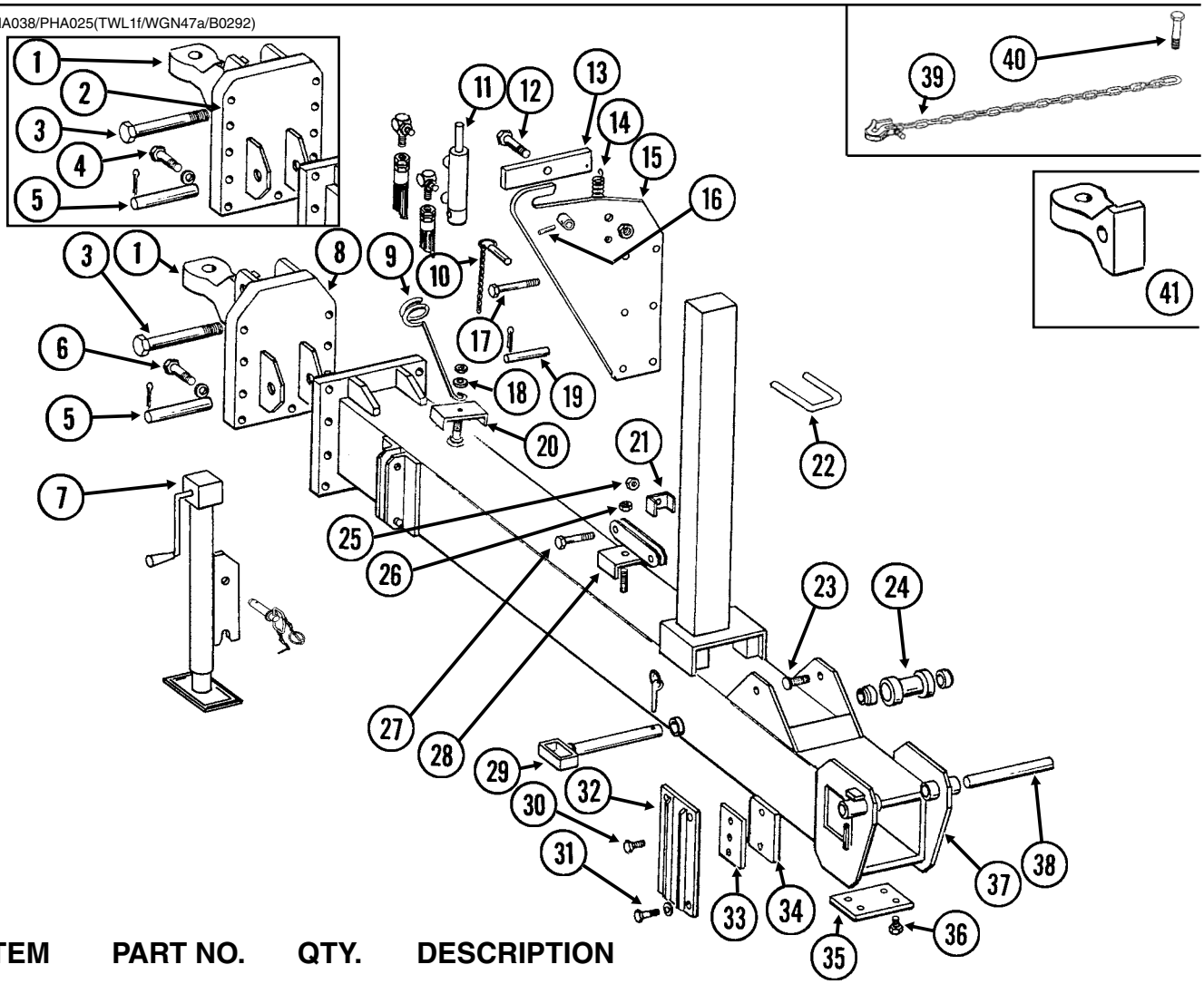


INTERPLANT® PUSH ROW UNIT

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	GD1026	1	Sleeve, 1 3⁄16" Long
2.	GD11218	1	Spring
3.	G10201	1	Special Washer, 3⁄8" x 1 1⁄2" O.D.
4.	GD8893-01	1	Sleeve, 1 3⁄8" Long
5.	GD11962	1	Idler
6.	G10210	1	Washer, 3⁄8" USS
7.	G10108	1	Lock Nut, 3⁄8"-16
8.	G3303-96	1	Chain, No. 41, 96 Pitch Including Connector Link
	GR0196	1	Connector Link, No. 41
9.	GA10161	-	Push Row Unit Shank
10.	GB0314	2	Hopper Mount
11.	G10751	2	Hex Head Cap Screw, 5⁄8"-18 x 1 3⁄4"
	G10412	2	Lock Nut, 5⁄8"-18
12.	G10599	1	Carriage Bolt, 3⁄8"-16 x 1 1⁄4"
	G10101	1	Hex Nut, 3⁄8"-16
	G10108	1	Lock Nut, 3⁄8"-16
13.	G10307	1	Carriage Bolt, 3⁄8"-16 x 3 1⁄2"
14.	GD10867	2	Stop
15.	G10004	4	Hex Head Cap Screw, 3⁄8"-16 x 1 1⁄4"
	G10108	4	Lock Nut, 3⁄8"-16
16.	GB0301	1	Seed Tube Guard/Inner Scraper
17.	G10912	2	Hex Socket Head Cap Screw, 5⁄16"-18 x 1", Grade 8
18.	G10751	4	Hex Head Cap Screw, 5⁄8"-18 x 1 3⁄4"
	GD7805	4	Special Washer, 5⁄8", Hardened
	G10412	4	Lock Nut, 5⁄8"-18
19.	GB0218	8	Bushing, 21⁄32" I.D. x 7⁄8" O.D. x 19⁄32" Long
20.	GA11969	1	Upper Arm
21.	GA5787	1	Lower Arm
22.	G10732	4	Hex Head Cap Screw, 5⁄8"-18 x 2"
	GD7805	4	Special Washer, 5⁄8", Hardened
	G10412	4	Lock Nut, 5⁄8"-18
23.	GA2180	-	Hanger Bearing, 7⁄8" Hex Bore
24.	G10004	2	Hex Head Cap Screw, 3⁄8"-16 x 1 1⁄4"
	G10229	2	Lock Washer, 3⁄8"
	G10101	2	Hex Nut, 3⁄8"-16
25.	GA11971	1	Mounting Plate
26.	GA9105	-	T-Bolt, 5⁄8"-11 x 6"
	G10230	-	Lock Washer, 5⁄8"
	G10104	-	Hex Nut, 5⁄8"-11
27.	G10718	2	Spring Pin, 5⁄16" x 1 1⁄8"
28.	GD11264	2	Lockup
29.	G10463	2	Cotter Pin, 1⁄4" x 1 1⁄2"
30.	GD11447	2	Spring
31.	G10284	2	Clevis Pin, 1⁄2" x 1 1⁄2"
	G10456	2	Cotter Pin, 1⁄8" x 3⁄4"
32.	GD11263	2	Spring Tab
33.	G10216	2	Washer, 1⁄2" USS
34.	GA8651	1	Lift Lever W/Boot
	GD11649	-	Boot
35.	GD18073	1	Bracket (Lift Lever)
36.	GD9695	1	Wire Lock Pin, 1⁄4" x 1 3⁄4"
37.	GD18074	1	Mount
38.	G10203	1	Washer, 3⁄8" SAE
39.	GR1900	1	Lock Collar
40.	G11243	1	Slotted Flat Head Machine Screw, No. 8-32 x 1⁄2", Stainless Steel
41.	GR1894	1	Air Housing Cover
42.	GR1830	1	Hex Bushing
43.	GR1818	1	Ratchet Gear
44.	GR1813	1	Clutch Spring
45.	GR1829	1	Sprocket Hub
46.	GR1899	1	Anti-Rotation
47.	G11296	2	Pan Head Machine Screw, 1⁄4"-20 x 3⁄4" x 3⁄4"
48.	GR1895	1	Air Clutch Housing
49.	GR1896	1	Air Cylinder
50.	GR1819	1	Push Connect, 1⁄8" NPT Male x 1⁄4"
51.	GR1898	1	Filter
52.	G11295	1	Retaining Ring
53.	GR1831	1	Sprocket, 19 Tooth
54.	G11239	3	Hex Head Cap Screw, 10-32 x 1⁄2"
55.	GD18891	1	Spacer, 1 1⁄4" O.D. x 1"
56.	GD11045	-	Lock Clamp
57.	G10130	-	Square Head Machine Bolt, 5⁄16"-18 x 1 3⁄4"
	G10923	-	Flange Nut, 5⁄16"-18, No Serration
A.	GA12630	-	Air Clutch Assembly, (Items 39-55)

OUTER HITCH/SAFETY CHAIN

PHA038/PHA025(TWL1f/WGN47a/B0292)



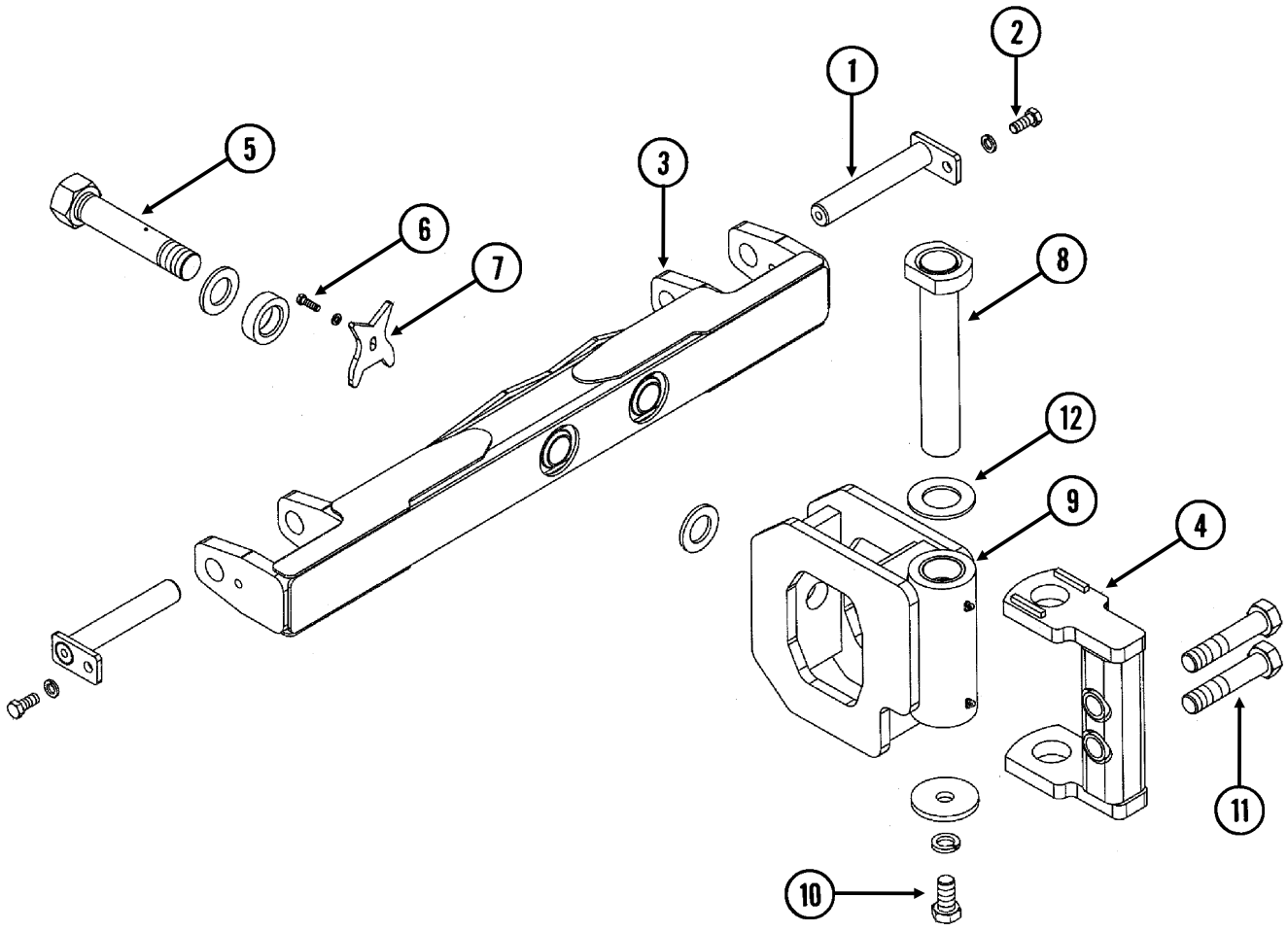
ITEM	PART NO.	QTY.	DESCRIPTION
1.	GB0237	1	Clevis, Single (1 ¾")
2.	GA9837	-	Hitch Mount, 16 Row
3.	G10169	1	Hex Head Cap Screw, 1 ¼"-7 x 6"
	G10157	1	Lock Nut, 1 ¼"-7
4.	G10802	11	Hex Head Cap Screw, ¾"-10 x 2 ¾"
	G10231	11	Lock Washer, ¾"
	G10105	11	Hex Nut, ¾"-10
5.	GD5173	1	Pin, 1 ¼" x 5 ⅛"
	G10462	2	Cotter Pin, 3/16" x 2"
6.	G10009	9	Hex Head Cap Screw, ⅝"-11 x 2 ½"
	G10230	9	Lock Washer, ⅝"
	G10104	9	Hex Nut, ⅝"-11
7.	GA4994	1	Jack Assembly Complete
	GA4995	-	Detent Pin Assembly
	GR0517	-	Pin
	GR0516	-	Crank Assembly
	GR0515	-	Bevel Gear Set, Includes: (2) Bevel Gears, (1) Gear Pin, (1) Groove Pin
8.	GA9836	1	Hitch Mount, 12 Row
9.	GD8260	1	Hose Holder
10.	GA7022	1	Detent Pin W/Chain (Transport Latch Locking Pin)
11.			See “Transport Latch Cylinder”, Page P64
12.	G10006	1	Hex Head Cap Screw, ⅝"-11 x 2 ¼"
	GB0218	1	Bushing, 21/32" I.D. x ⅞" O.D. x 19/32" Long
	GD7805	1	Special Washer, ⅝", Hardened
	G10107	1	Lock Nut, ⅝"-11
13.	GA7016	1	Catch Bar
14.	GD5857	1	Spring
15.	GA7433	1	Transport Latch
16.	G10765	-	Spring Pin, ¼" x 1"

OUTER HITCH/SAFETY CHAIN

ITEM	PART NO.	QTY.	DESCRIPTION
17.	G10062	1	Hex Head Cap Screw, ⅜"-16 x 3"
	GD2971-09	1	Sleeve, 2" Long
	G10108	1	Lock Nut, ⅜"-16
18.	G10216	1	Washer, ½" USS
	G10111	1	Lock Nut, ½"-13
19.	GD7137	1	Pin, ¾" x 3 ⅜"
	G10457	2	Cotter Pin, 5⁄32" x 1 ½"
20.	GD8188	-	Hose Clamp, ⅞" x 3" x 5 ⅜"
	GD8189	-	Rubber Pad
21.	GD5892	2	Hose Clamp, ⅝" x 1 ½" x 1 ½"
22.	GD9953	3	U-Bolt, 3" x 4" x ⅝"-11
	G10205	1	Washer, ⅝" SAE
	G10230	6	Lock Washer, ⅝"
	G10104	6	Hex Nut, ⅝"-11
23.			See “Hose Take-Up”, Pages P42 And P43
24.	GA4418	1	Roller W/Bronze Bushings, 12 Row
	GA4842	-	Roller W/Bronze Bushings, 16 Row
	GD6556	1	Bronze Bushing
25.	G10108	1	Lock Nut, ⅜"-16
26.	G10111	1	Lock Nut, ½"-13
27.	G10026	1	Hex Head Cap Screw, ¾"-10 x 2"
	G10112	1	Lock Nut, ¾"-10
28.	GA5842	1	Bracket, Jack Mount
	GD8189	-	Rubber Pad
29.	GA4402	1	Safety Pin, 12 ¾", 12 Row
	GA4845	-	Safety Pin, 14 ¾", 16 Row
	GD2558	-	Lynch Pin, ¼"
	GD2557	-	Lynch Pin, 7⁄16"
30.	G10014	4	Hex Head Cap Screw, ½"-13 x 1"
	G10228	4	Lock Washer, ½"
31.	G10017	8	Hex Head Cap Screw, ½"-13 x 1 ½", 12 Row
	G10016	10	Hex Head Cap Screw, ½"-13 x 2", 16 Row
	G10228	8-10	Lock Washer, ½"
	G10102	8-10	Hex Nut, ½"-13
32.	GA7029	2	Wear Mount, 12 Row
	GA7084	-	Wear Mount, L.H., 16 Row
	GA7085	-	Wear Mount, R.H., 16 Row
	GA7083	-	Wear Pad Retainer, 16 Row
33.	GD5154	-	Shim, 4" x 4" (As Required), All Sizes
	GD3501	-	Shim, 4" x 6" (As Required), 16 Row
34.	GD9959	-	Wear Pad, Nylatron, 4" x 4" (As Required), All Sizes
	GD9960	-	Wear Pad, Nylatron, 4" x 6" (As Required), 16 Row
35.	GD7519	3	Shim, 16 Gauge, 16 Row
	GD7518	1	Shim, ⅜", 16 Row
36.	G10014	4	Hex Head Cap Screw, ½"-13 x 1"
	G10228	4	Lock Washer, ½"
	G10216	4	Washer, ½" USS
37.	A7010	-	Outer Hitch, Y, 97", 12 Row 30" **(Non-Stock Item)**
	A7088	-	Outer Hitch, Y, 127 ½", 16 Row 30" **(Non-Stock Item)**
38.	GD5804	1	Pin, 1 ¼" x 12", 12 Row
	GD7251	1	Pin, 1 ¼" x 14", 16 Row
	G10610	2	Spring Pin, ⅜" x 2"
39.	GA7533	1	Safety Chain, ½"
	G1K412	-	Safety Chain Repair Kit, Includes Hook, Flat Washer, Latch Pin, Safety Latch, Spring And Retaining Ring
40.	G11058	1	Hex Head Cap Screw, 1 ¼"-7 x 3"
	GD10646	1	Special Washer
	G10226	1	Washer, 1 ¼" SAE
	G10157	1	Lock Nut, 1 ¼"-7
41.	GB0292	-	Hitch Clevis, Single (2" Hole)

2-POINT HITCH OPTION

(A12406)

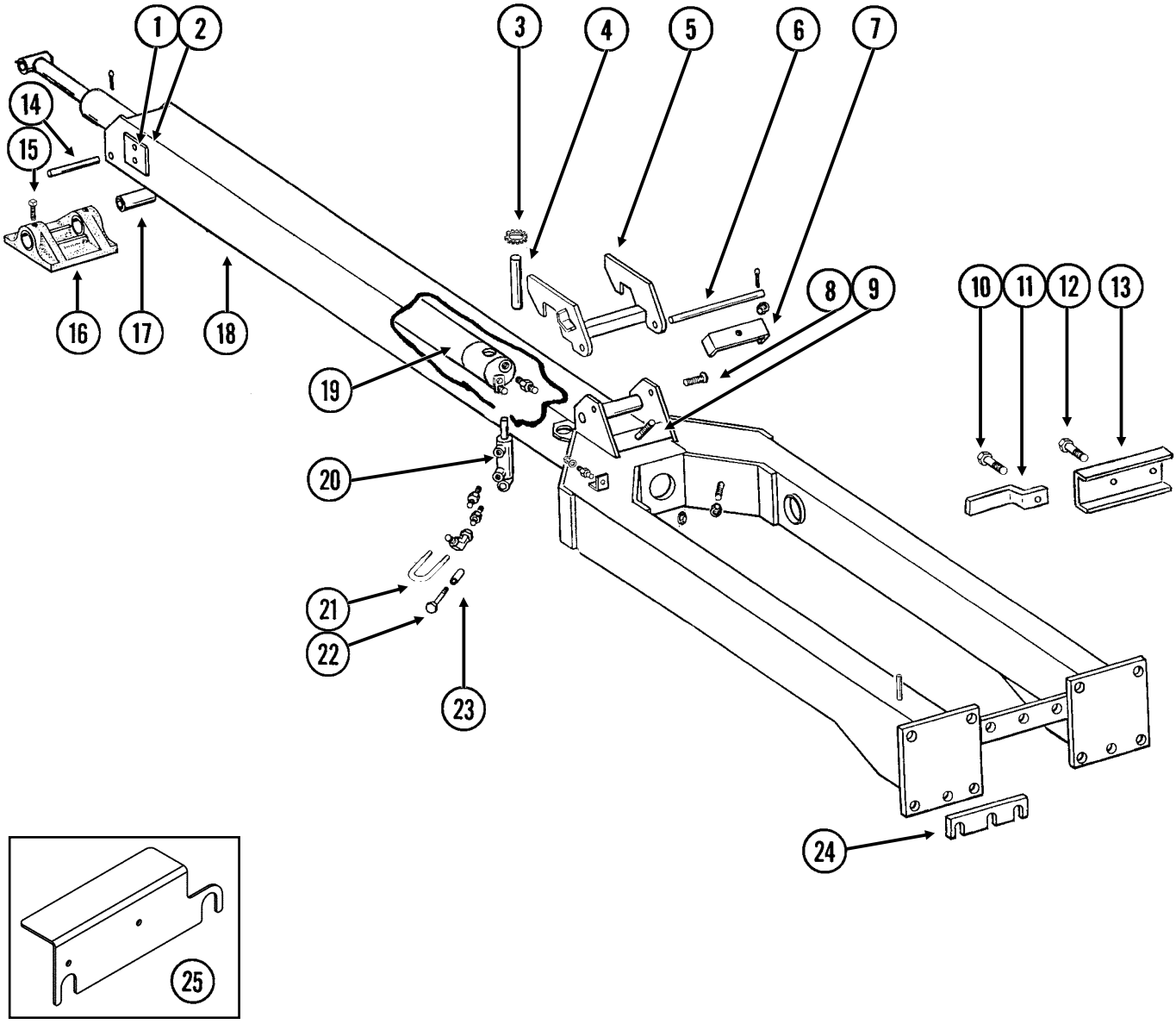


2-POINT HITCH OPTION

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA11079	2	Hammer Strap, Category 3N
2.	G10007	2	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
	G10230	2	Lock Washer, 5/8"
3.	GA12164	1	Hitch Bar
4.	GA12165	1	Pivot Mount
5.	GA11082	1	Pivot Bolt W/Grease Fitting, 1 3/4" x 10 3/8" (Total Length)
	G10640	-	Grease Fitting, 1/4"-28
	GD16303	2	Washer, 3" O.D. x 1 25/32" x 1/4" Thick
	GD16226	1	Sleeve, 3" O.D. x 1 25/32" x 29/32 Thick
6.	G10005	1	Hex Head Cap Screw, 5/8"-11 x 1 1/4"
	G10217	1	Washer, 5/8" USS
7.	GD15100	1	Pivot Lock
8.	GA12163	1	Pin, 13 3/8"
9.	GA11083	1	Hitch Pivot W/Bushings And Grease Fittings
	GD14562	2	Hardened Bushing, 2 3/4" O.D. x 2 1/4" I.D. x 3”
	G10779	2	Grease Fitting, 90°, 1/4"-28
10	G11223	1	Hex Head Cap Screw, 1"-8 x 2"
	G10118	1	Lock Washer, 1"
	GD17245	1	Washer, 4" O.D. x 1 1/32" I.D. x 3/8"
11.	G10169	2	Hex Head Cap Screw, 1 1/4"-7 x 6"
	G10157	2	Lock Nut, 1 1/4"-7
12.	GD15725	1	Washer, 4" O.D. x 2 1/4" I.D. x 1/4"

INNER HITCH

PHA035/PHA037(TWL2i)

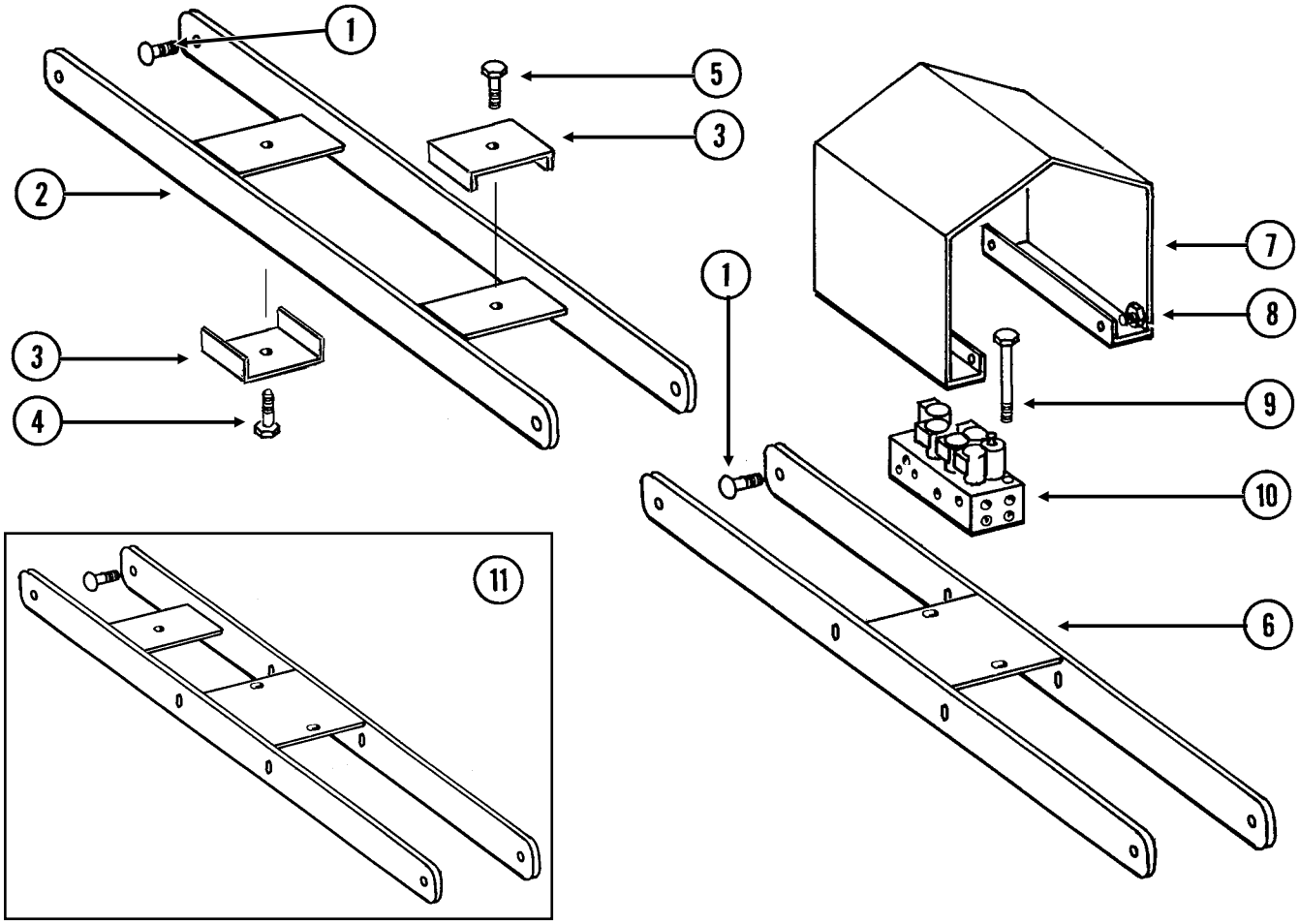


INNER HITCH

ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10014	4	Hex Head Cap Screw, ½"-13 x 1", 8 Row 36"/38" And 12 Row
	G10017	4	Hex Head Cap Screw, ½"-13 x 1 ½", 16 Row
	G10228	4	Lock Washer, ½", 16 Row 30"
2.	GD9959	2	Wear Pad, Nylatron, 4" x 4"
	GD5154	4-6	Shim, 4" x 4"
3.	G10894	-	External Washer
4.	GD3537-17	1	Shaft, 1 ¼" x 6 ⅜", 12 Row
	GD3537-18	-	Shaft, 1 ¼" x 7 ⅜", 16 Row
5.	GA7423	1	Tongue Hook W/Grease Fittings, 12 Row
	GA7424	-	Tongue Hook W/Grease Fittings, 16 Row
	G10641	-	Grease Fitting, ⅛" NPT
6.	GD5804	1	Pin, 1 ¼" x 12", 12 Row
	GD7883	-	Pin, 1 ¼" x 14 ½", 16 Row
	G10468	2	Cotter Pin, ⅜" x 2"
7.	GD8188	-	Hose Clamp, ⅞" x 3" x 5 ⅜"
	GD8189	-	Rubber Pad
8.			See “Hose Take-Up”, Pages P42 And P43
9.	G11169	1	Hex Head Cap Screw, ½"-13 x 3 ½"
	G10111	1	Lock Nut, ½"-13
10.	G10004	1	Hex Head Cap Screw, ⅜"-16 x 1 ¼"
	G10229	1	Lock Washer, ⅜"
	G10101	1	Hex Nut, ⅜"-16
11.	GD10650	1	Hose Clamp
12.	G10003	1	Hex Head Cap Screw, ⅜"-16 x 1 ½"
	G10210	1	Washer, ⅜" USS
	G10108	1	Lock Nut, ⅜"-16
13.	GD10664	1	Shield (If Applicable)
14.	GD5173	1	Pin, 1 ¼" x 5 ⅛"
	G10462	1	Cotter Pin, 3⁄16" x 2"
15.	G10131	1	Square Head Set Screw, 5⁄16"-18 x ¾"
16.	GB0246	1	Shoe
17.	GD3537-11	1	Shaft, 1 ¼" x 7", 8/12 Row
	GD3537-12	-	Shaft, 1 ¼" x 8", 16 Row
18.	A7429	-	Inner Hitch, 169 ⅜", 12 Row 30" (Shown) **(Non-Stock Item)**
	A7426		Inner Hitch, 205 ⅜", 16 Row 30" **(Non-Stock Item)**
19.		-	See “Tongue Cylinder”, Pages P66-P68
20.		-	See “Tongue Lock Cylinder”, Page P66
21.	GD10530	1	U-Bolt, 2 ⅛" x 1 ⅞" x ⅜"-16
	G10229	2	Lock Washer, ⅜"
	G10101	2	Hex Nut, ⅜"-16
22.	G10585	1	Hex Head Cap Screw, ½"-13 x 3 ¼"
	G10216	1	Washer, ½" USS
	G10228	1	Lock Washer, ½"
	G10102	1	Hex Nut, ½"-13
23.	GD10538-01	1	Sleeve
24.	GD13543	1	Shim, 2 ½" x 10", 7 Gauge
	GD13544	1	Shim, 2 ½" x 10", 10 Gauge
	GD13545	1	Shim, 2 ½" x 10", 12 Gauge
	GD13546	1	Shim, 2 ½" x 10", 14 Gauge
25.	GD18116	1	Rotation Bracket

HOSE TAKE-UP

(TWL137e/TWL137d)



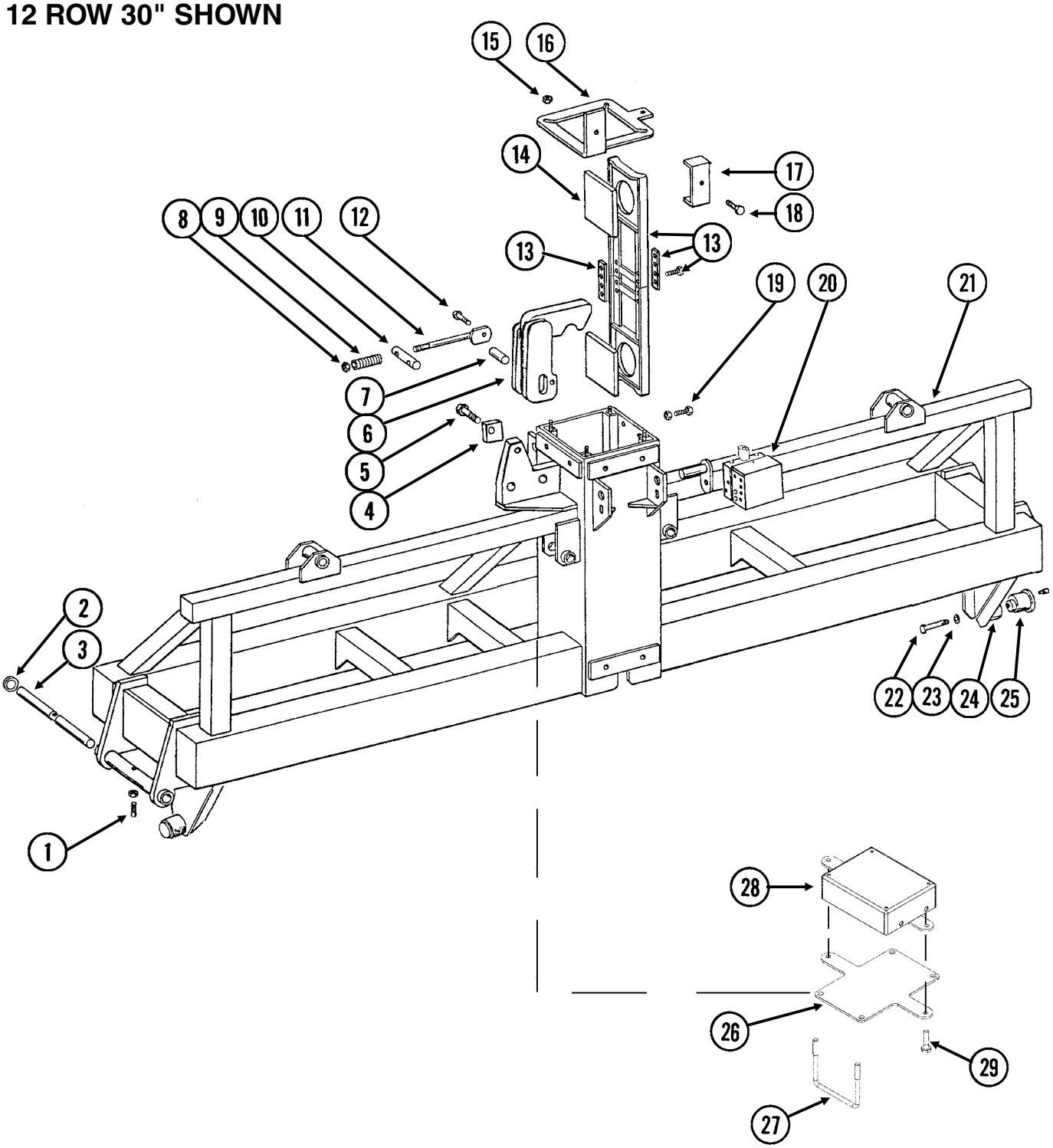
HOSE TAKE-UP

ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10689	6	Carriage Bolt, 5/8"-11 x 2"
	GB0218	6	Bushing, 21/32" I.D. x 7/8" O.D. x 19/32" Long
	GD7805	6	Special Washer, 5/8", Hardened
	G10107	6	Lock Nut, 5/8"-11
2.	GA7013	-	Take-Up, 44 1/4", 12 Row
	GA7049	-	Take-Up, 56 1/4", 16 Row
3.	GD8188	2	Clamp, 7/8" x 3" x 5 3/8"
	GD8189	2	Rubber Pad
4.	G10581	1-2	Hex Head Cap Screw, 1/2"-13 x 2 1/4"
	G10053	-	Hex Head Cap Screw, 1/2"-13 x 2 1/2"
	G10111	1	Lock Nut, 1/2"-13
5.	G10581	1	Hex Head Cap Screw, 1/2"-13 x 2 1/4"
	G10111	1	Lock Nut, 1/2"-13
6.	GA7021	-	Take-Up, 44 1/4", 12 Row
7.	GD9952	1	Cover
8.	G10004	4	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
	G10229	4	Lock Washer, 3/8"
	G10203	8	Washer, 3/8" SAE
	G10101	4	Hex Nut, 3/8"-16
9.	G10172	2	Hex Head Cap Screw, 3/8"-16 x 5"
	G10210	2	Washer, 3/8" USS
	G10108	2	Lock Nut, 3/8"-16
10.			See “Valve Block - Located On Hitch”, Pages P72 And P73
11.	GA7050	-	Take-Up, 56 1/4", 16 Row

CENTER FRAME

PFA070/VVB034(TWL138b)

12 ROW 30" SHOWN

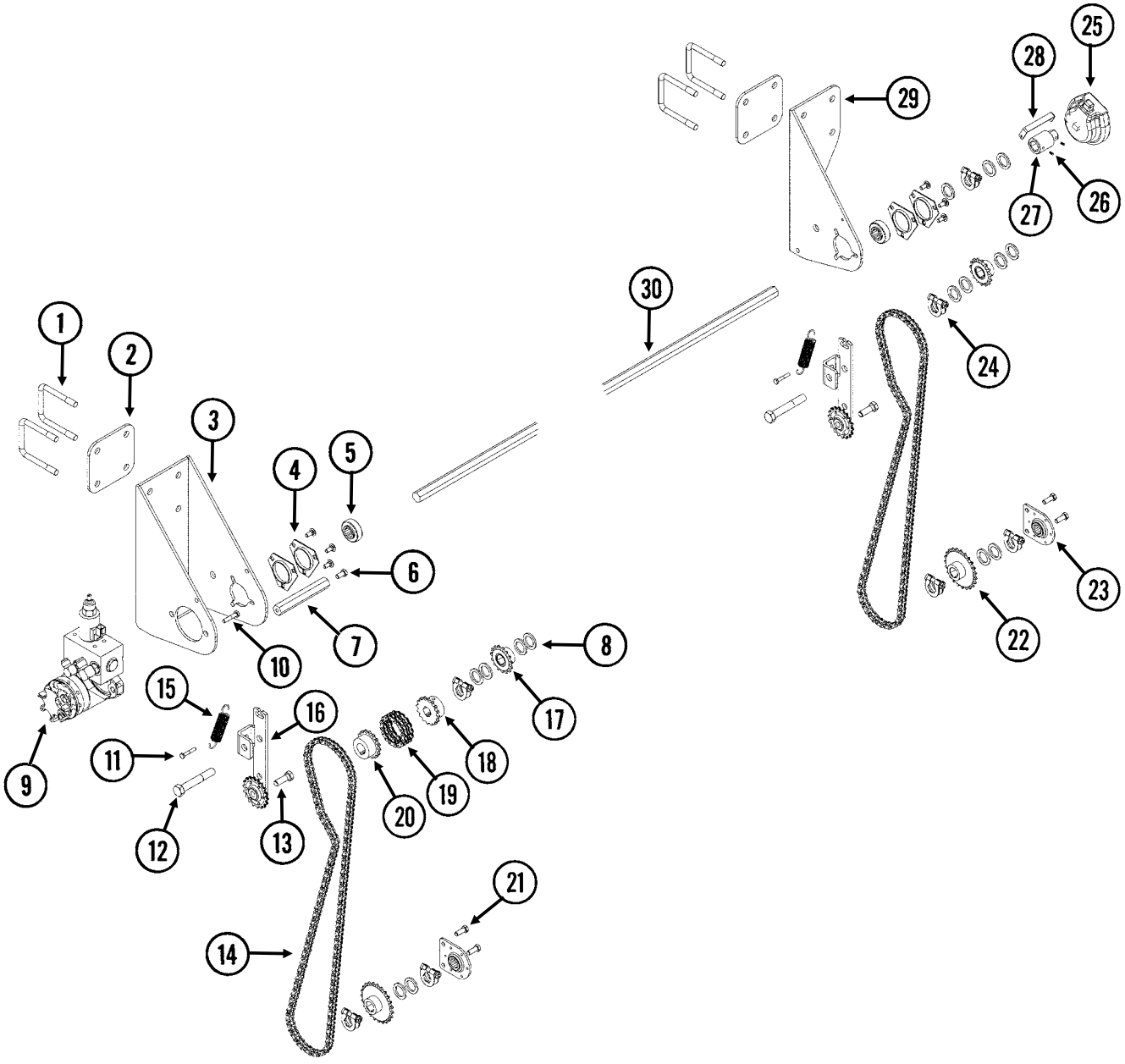


CENTER FRAME

ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10102	1	Hex Nut, ½"-13
	G10828	1	Hex Socket Set Screw, ½"-13 x 1 ¼"
2.	G10404	-	Machine Bushing, 3 ⅛" x 2 ⅛" x 3⁄16" (As Required)
	G10234	-	Machine Bushing, 2 ⅛", 10 Gauge (As Required)
	G10336	-	Machine Bushing, 2 ⅛", 14 Gauge (As Required)
3.	GD10531	1	Hinge Pin, 2 ⅛" x 25 ¾"
4.	GD10492	2	Adjustment Block
5.	G10085	-	Hex Head Cap Screw, ¾"-10 x 3 ¾"
	G10218	-	Washer, ¾" USS
	G10112	-	Lock Nut, ¾"-10
6.	GA7390	-	Safety Hook
7.	GD9898	1	Pin, 1 ¼" x 2 15⁄16"
8.	G10205	2	Washer, ⅝" SAE
	G10107	2	Lock Nut, ⅝"-11
9.	GD10006	2	Spring
10.	GD9870	1	Pin, 1 ¼" x 6"
11.	GA6943	2	Spring Rod
12.	G10037	2	Hex Head Cap Screw, ½"-13 x 1 ¼"
	G10206	2	Washer, ½" SAE
	G10228	2	Lock Washer, ½"
	GD7904-02	2	Sleeve, ½" x ½" Long
13.	GA7579	4	Pad Holder W/Bars
	GD10706	-	Bar, 1 ¼" x 6" x ¼" Thick
	GD10707	-	Bar, 1 ¼" x 6" x ⅜" Thick
	G10001	-	Hex Head Cap Screw, ⅜"-16 x 1"
14.	GD10053	8	Wear Pad, 7" x 7", ½" Thick
15.	GD7805	4	Special Washer, ⅝", Hardened
	G10104	4	Hex Nut, ⅝"-11
16.	GD9968	1	Cap
17.	GD8188	1	Hose Clamp, ⅞" x 3" x 5 ⅜"
	GD8189	1	Rubber Pad
18.	G10053	1	Hex Head Cap Screw, ½"-13 x 2 ½"
	G10228	1	Lock Washer, ½"
	G10102	1	Hex Nut, ½"-13
19.	G10543	16	Hex Head Cap Screw, ¾"-10 x 3", Full Thread
	G10105	16	Hex Nut, ¾"-10
20.		-	See “Valve Blocks - Located On R.H. Rear Center Frame”, Page P71
21.	A7393	-	Frame W/Cam Follower Mounts, 136" **(Non-Stock Item)**
	GA6929	-	Cam Follower Mount, L.H.
	GA6928	-	Cam Follower Mount, R.H.
22.	G10025	2	Hex Head Cap Screw, ¾"-10 x 1 ½"
23.	GB0409	2	Spring Washer
24.	GD10532	2	Sleeve
25.	GA6497	2	Cam Follower W/Grease Fitting
	G10640	-	Grease Fitting, ¼"-28
26.	GD18344	1	Valve Box Mount
27.	GD18329	2	U-Bolt, 5⁄16"-18
	G10106	2	Hex Nut, 5⁄16"-18
	G10232	2	Lock Washer, 5⁄16"
28.			See “Valve Box Module”, Pages P82 and P83
29.	G10064	2	Hex Head Cap Screw, ¼"-20 x 1"
	G10227	2	Lock Washer, ¼"
	GD7363-01	2	Sleeve, ½" Long
	G10103	2	Hex Nut, ¼"-20

HYDRAULIC DRIVE

(VI55)

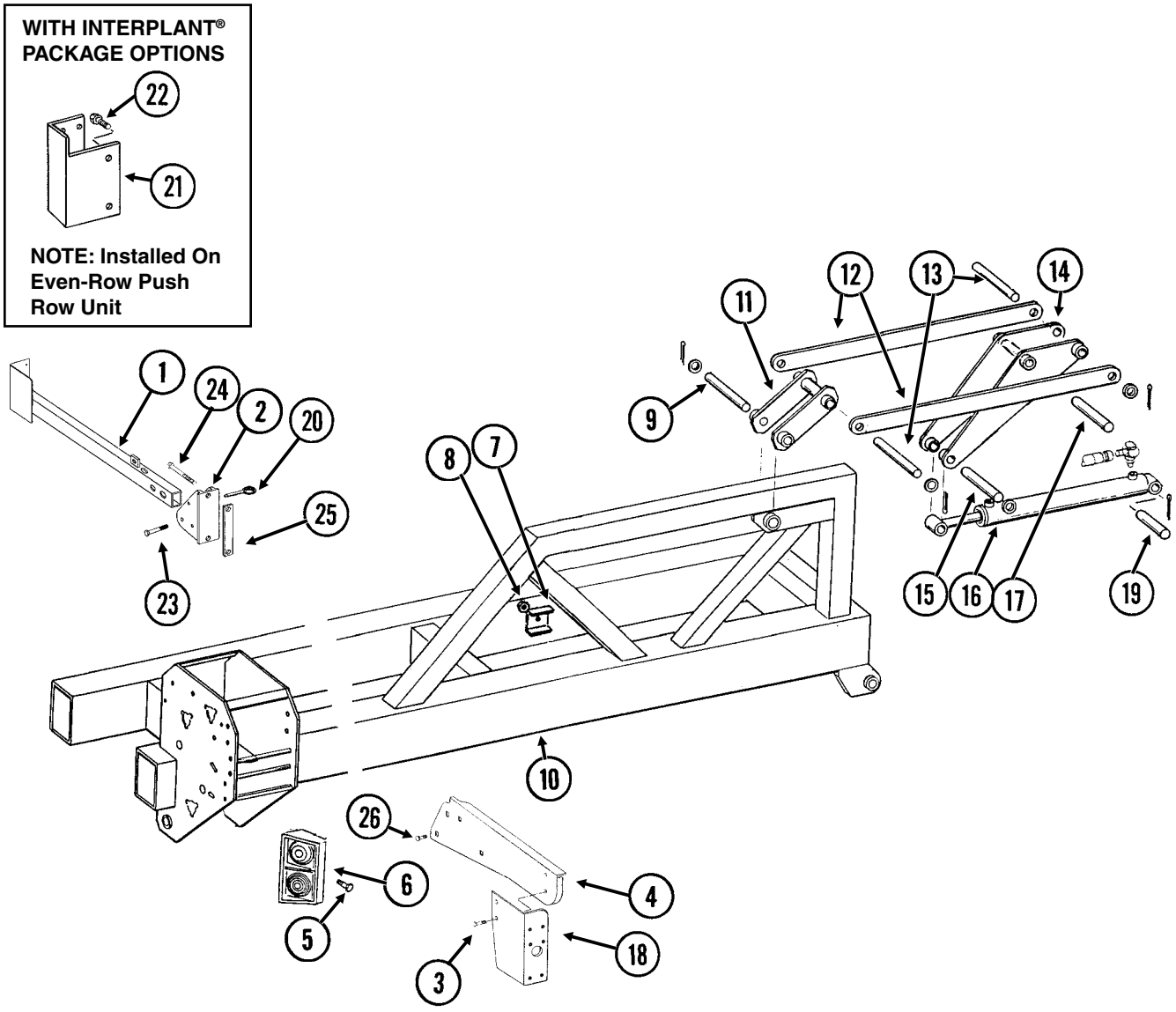


HYDRAULIC DRIVE

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD4743	4	U-Bolt, 3" x 3" x ½"-13
2.	GD18114	2	Spacer
3.	GA12569	1	Motor Bracket
4.	G3400-01	4	Flangette
5.	G2100-03	2	Bearing, ⅞" Hex Bore, Spherical
6.	G10002	1	Hex Head Cap Screw, ⅜"-16 x ¾"
7.	GD18326	1	Hex Spacer
8.	G10233	15	Machine Bushing, 1", 10 Gauge
9.			See “Valve Block - Located On L.H. Rear Center Frame”, Pages P74 And P75
10.	G10133	3	Hex Head Cap Screw, 5⁄16"-18 x 1 ½"
11	G10021	2	Hex Head Cap Screw, ¼"-20 x 1 ½"
12.	G10036	2	Hex Head Cap Screw, ⅝"-11 x 4"
13.	G10017	2	Hex Head Cap Screw, ½"-13 x 1 ½"
14.	G3310-84	2	Chain, No. 40, 84 Pitch Including Connector Link
	GR0912	-	Connector Link, No. 40
15.	GD5857	2	Spring
16.	GA9553	2	Idler W/Sprocket And Hardware
	GA7154	-	Sprocket W/Bearing, 19 Tooth
	G10017	-	Hex Head Cap Screw, ½"-13 x 1 ½"
	G10128	-	Machine Bushing, ½", 14 Gauge
	G10501	-	Hex Jam Nut, ½"-13, Grade 2
	GD13422	-	Idler Arm
17.	GA5105	2	Sprocket, 15 Tooth
18.	GD16490	2	Coupler, 1" I.D.
19.	G3317-16	1	Chain, Double No. 40, 16 Pitches
	GR1790	-	Connector Link, Double No. 40
20.	GD16489	1	Coupler, ⅞" Hex
21.	G10001	4	Hex Head Cap Screw, ⅜"-16 x 1"
22.	GA5108	2	Sprocket, 23 Tooth
23.	GA2180	2	Hanger Bearing, ⅞" Hex Bore
24.	GA11331	2	Hex Lock Clamp Assembly
25.	GA12565	1	Encoder Module
26.	G11242	1	Hex Socket Set Screw, ¼"-20 x ⅜"
27.	GA12661	7	Hex Adapter Encoder
28.	GD18115	1	Encoder Bracket
29.	GD18014	1	Carrier Bracket
30.	GD0914-54.75	1	Hex Shaft, ⅞" x 54 ¾" (No Holes)

WING FRAME

(TWL180a/TWL139i)

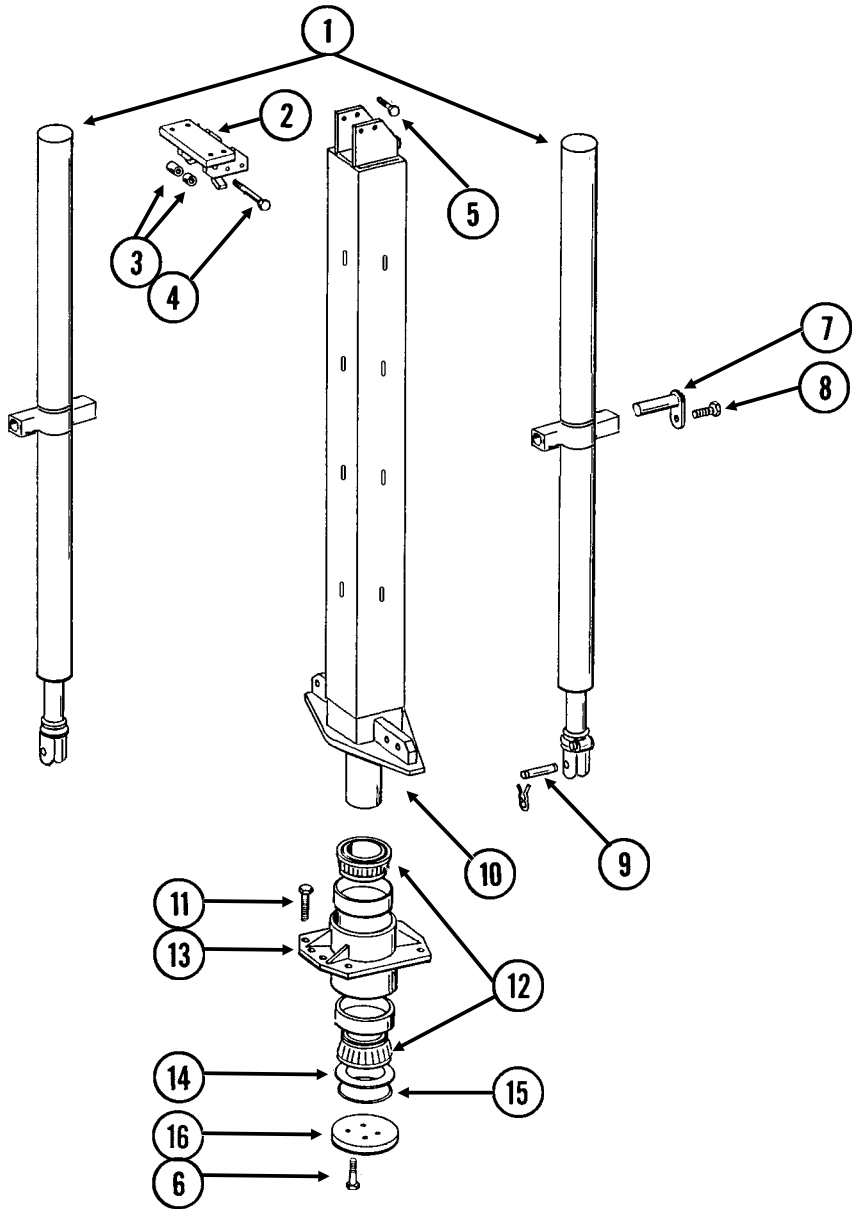


WING FRAME

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA9840	1	Light Bracket
2.	GB0309	1	Light Mount Bracket
3.	G10064	2	Hex Head Cap Screw, ¼"-20 x 1"
	G10227	2	Lock Washer, ¼"
	G10103	2	Hex Nut, ¼"-20
4.	GD15950	1	Light Mount Extension
5.	G10064	8	Hex Head Cap Screw, ¼"-20 x 1"
	G10110	8	Lock Nut, ¼"-20, Grade B
6.		-	See “Electrical Components”, Pages P84 And P85
7.	GD5875	-	Hose Clamp, 9⁄16" x 2 ½" x 2"
8.	G10108	-	Lock Nut, ⅜"-16
9.	GD9963	1	Pin, 1 ¼" x 9"
	G10460	2	Cotter Pin, ¼" x 2"
10.	A6904	-	Wing, R.H., 119 ¼", 12 Row **(Non-Stock Item)**
	A6905	-	Wing, L.H., 119 ¼", 12 Row **(Non-Stock Item)**
	A6892	-	Wing, R.H., 179 ¼", 16 Row (Two Wheel Towers Per Wing) **(Non-Stock Item)**
	A6893	-	Wing, L.H., 179 ¼", 16 Row (Two Wheel Towers Per Wing) **(Non-Stock Item)**
11.	GA7018	1	Link
12.	GD9956	2	Strap, 41"
13.	GD9964	2	Pin, 1 ¼" x 10 ½"
	G10159	4	Machine Bushing, 1 ¼", 10 Gauge
	G10460	4	Cotter Pin, ¼" x 2"
14.	GA7019	1	Toggle Link
15.	GD4108	1	Pin, 1 ¼" x 7"
	G10159	2	Machine Bushing, 1 ¼", 10 Gauge
	G10460	2	Cotter Pin, ¼" x 2"
16.		-	See “Wing Lock Cylinder”, Page P69
17.	GD9955	1	Pin 1 ¼" x 7"
	G10606	2	Spring Pin, ¼" x 2"
18.	GD12724	1	Bracket
19.	GD6136	2	Pin, 1 ¼" x 5"
	G10460	4	Cotter Pin, ¼" x 2"
20.	G10874	1	Detent Pin, ½" x 3 ½" Grip
21.	GD12703	1	Push Row Unit Light Bracket
22.	G10001	2	Hex Head Cap Screw, ⅜"-16 x 1"
	G10229	2	Lock Washer, ⅜"
	G10101	2	Hex Nut, ⅜"-16
23.	G10033	1	Hex Head Cap Screw, ½"-13 x 3 ½"
	G10206	4	Washer, ½" SAE
	G10111	1	Lock Nut, ½"-13
24.	G10439	2	Hex Head Cap Screw, ⅝"-11 x 7"
	G10230	2	Lock Washer, ⅝"
	G10104	2	Hex Nut, ⅝"-11
25.	GD1908	1	Mounting Bracket
26.	G10312	2	Carriage Bolt, 5⁄16"-18 x ¾"
	G10620	2	Serrated Flange Nut, 5⁄16"-18
A.	G7698X	-	Push Row Unit Mounted Light Bracket Package (Items 21 And 22 On This Page And 42" Harness Extension, Item 5 On Pages P84 And P85)

CENTER PIVOT

PFA067/PFA068(TWL7c)

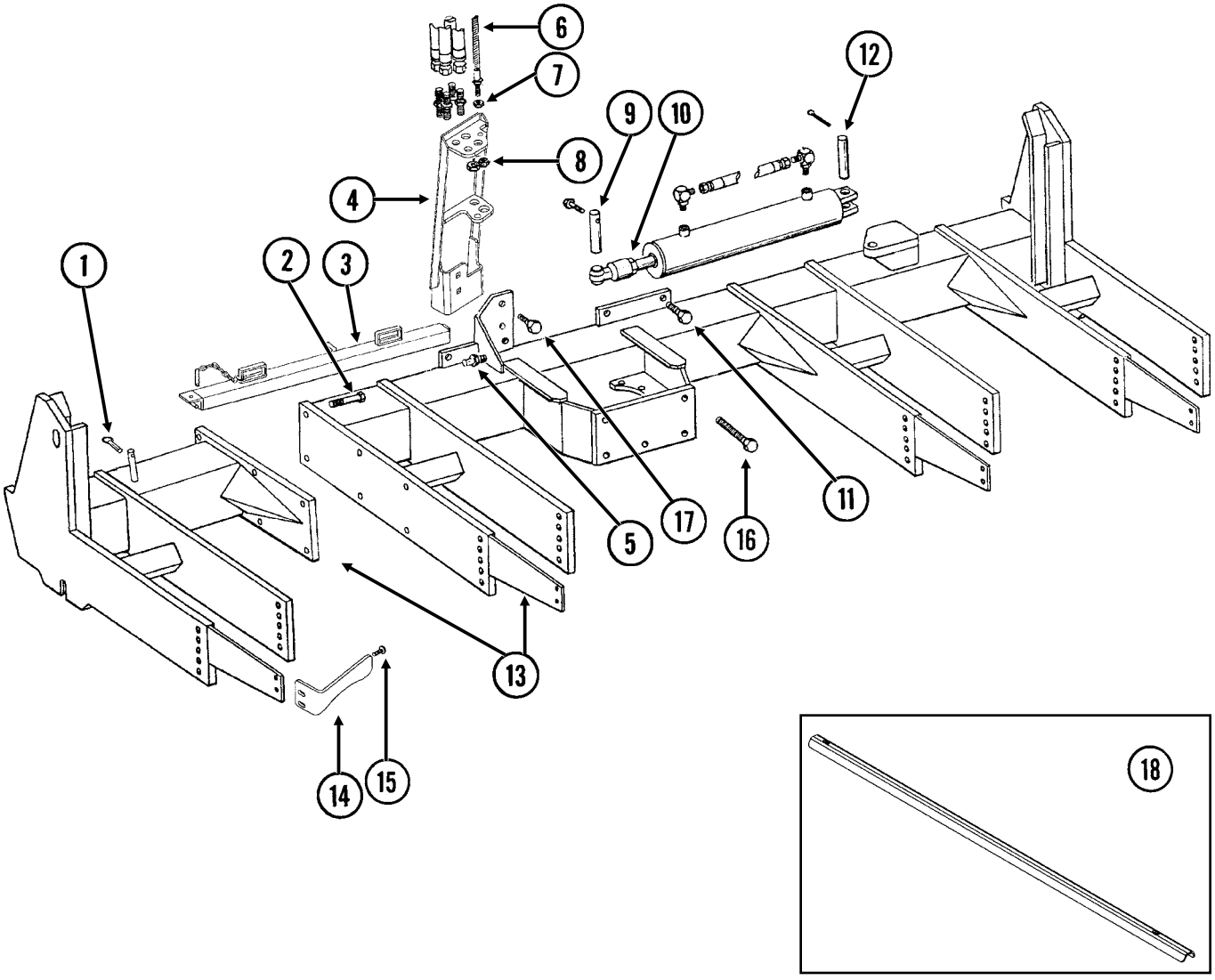


CENTER PIVOT

ITEM	PART NO.	QTY.	DESCRIPTION
1.		-	See “Center Lift Cylinder”, Page P64
2.	GA6964	1	Hook Strap
3.	GD10447	1	Sleeve, 3 5/8"
	GD10446	1	Sleeve, 3 13/16"
4.	G10011	1	Hex Head Cap Screw, 5/8"-11 x 5 1/2"
	G10107	1	Lock Nut, 5/8"-11
5.	G10689	4	Carriage Bolt, 5/8"-11 x 2"
	G10107	4	Lock Nut, 5/8"-11
6.	G10027	4	Hex Head Cap Screw, 3/4"-10 x 2 1/2"
	GD2169	1	Special Washer, 25/32" I.D. x 1 1/4" O.D., Hardened
7.	GA5121	4	Pin, 2 1/8"
8.	G10017	4	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10216	4	Washer, 1/2" USS
	G10228	4	Lock Washer, 1/2"
	G10102	4	Hex Nut, 1/2"-13
9.	GR0375	2	Pin, 1" x 3 1/2"
	GR0193	4	Hair Pin Clip
10.	GA7540	1	Center Post
11.	G10441	8	Hex Head Cap Screw, 7/8"-9 x 3", Grade 8
	GD10063	8	Hardened Washer, 7/8"
	G11053	8	Hex Nut, 7/8"-9, Grade 8
12.	GA7096	2	Cone
13.	GA7067	1	Bearing Housing W/Cups, Less Grease Fitting
	GD10011	2	Cup
	G10779	1	Grease Fitting, 90°, 1/4"-28
14.	GD10012	-	Shim, .005" Thick (As Required)
	GD10013	-	Shim, .020" Thick (As Required)
	GD10014	-	Shim, .007" Thick (As Required)
15.	GD9130	1	O-Ring
16.	GD9636	1	Bearing Cap

AXLE ASSEMBLY

HTA043/HTA044/PFA071/PHA033/PHA034/PFA073(TWL140cc)

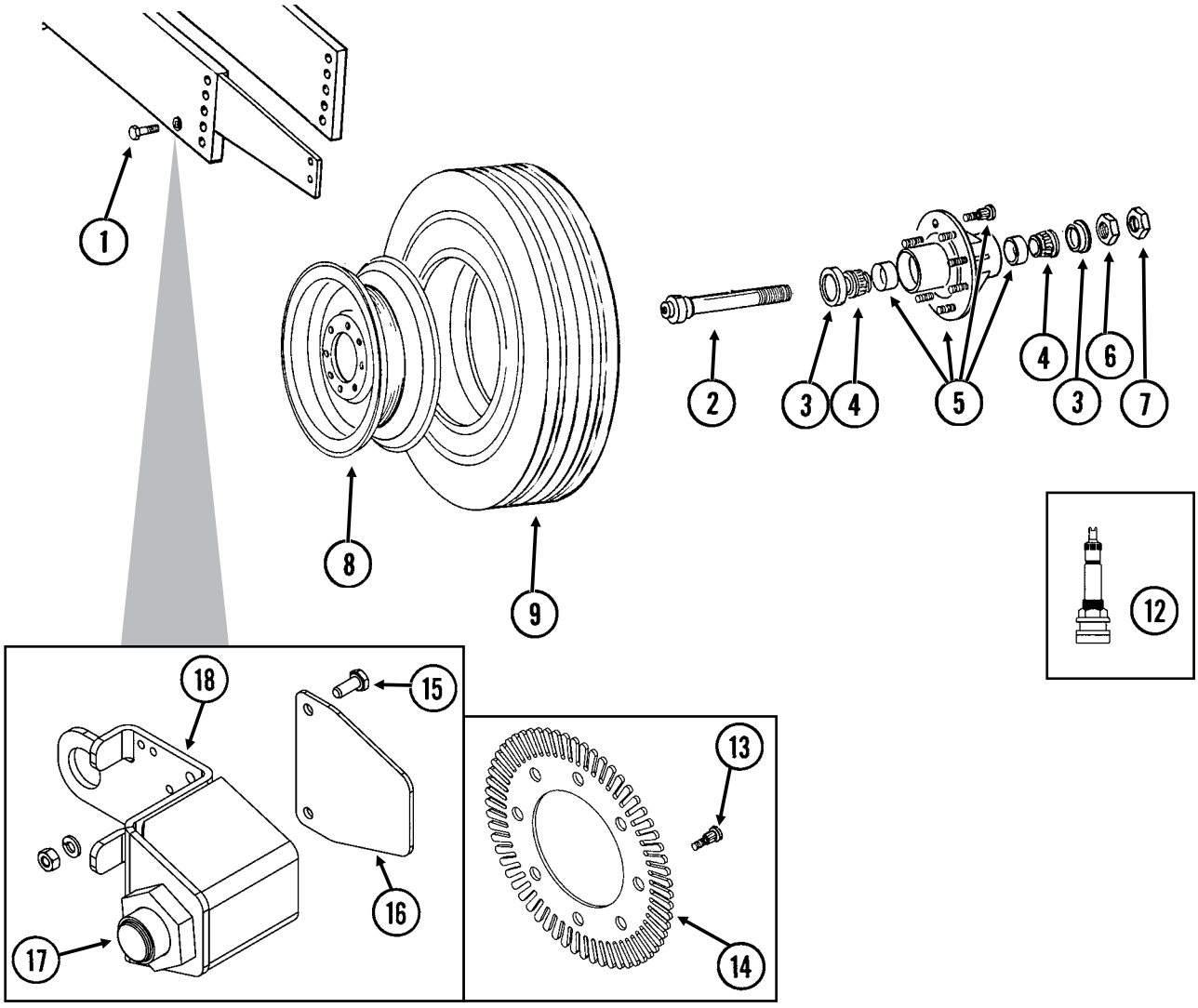


AXLE ASSEMBLY

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD2558	1	Lynch Pin, ¼"
2.	G10802	6	Hex Head Cap Screw, ¾"-10 x 2 ¾"
	G10028	-	Hex Head Cap Screw, ¾"-10 x 3"
	G10231	6	Lock Washer, ¾"
	G10105	6	Hex Nut, ¾"-10
3.	GA7098	1	Manual Safety Lockup W/Detent Pin
	GA7022	1	Detent Pin W/Chain
4.	GA11200	1	Bulkhead Mount
5.	GD8276	1	Pin
	G10237	1	Lock Washer, 7⁄16"
	G10100	1	Hex Nut, 7⁄16"-14
6.	GA6608	-	Cable Assembly
7.	G10228	2	Lock Washer, ½"
	G10102	2	Hex Nut, ½"-13
8.	G306-08	2	Lock Nut, ¾"-16
	G306-10	2	Lock Nut, ⅞"-14
9.	GD10092	1	Pin, 1 ¼" x 5 1/4"
	G10226	4	Washer, 1 ¼" SAE
	G10049	1	Hex Head Cap Screw, ⅜"-16 x 2 ½"
	G10108	1	Lock Nut, ⅜"-16
10.		-	See “Rotation Cylinder”, Page P64
11.	G10437	4	Hex Head Cap Screw, ¾"-8 x 2 ½", Grade 8
	GD2169	4	Special Washer, 25⁄32" I.D. x 1 ¼" O.D., Hardened
	G10436	4	Hex Nut, ¾"-10
12.	GD10064	1	Pin, 1 ¼" x 5 ¼", All Sizes
	G10460	2	Cotter Pin, ¼" x 2"
13.	GA8062	-	Axle W/Stub Axle
	GA9883	-	Stub Axle, Narrow Row
14.	GD12543	-	Scraper
15.	G10636	-	Carriage Bolt, ½"-13 x 1 ½"
	G10216	-	Washer, ½" USS
	G10228	-	Lock Washer, ½"
	G10102	-	Hex Nut, ½"-13
16.	G10808	6	Hex Head Cap Screw, 1"-8 x 10", Grade 8
	GD10231	6	Special Washer, 1 1⁄16" I.D. x 2" O.D.
	G10647	6	Hex Nut, 1"-8, Grade 8
17.	G10636	-	Carriage Bolt, ½"-13 x 1 ½"
	G10228	-	Lock Washer, ½"
	G10102	-	Hex Nut, ½"-13
18.	GD18645	1	Cable Guard

TRANSPORT WHEELS/ROCK GUARDS

HTA032/HTA040/HTA043/HTA004(TWL141c)



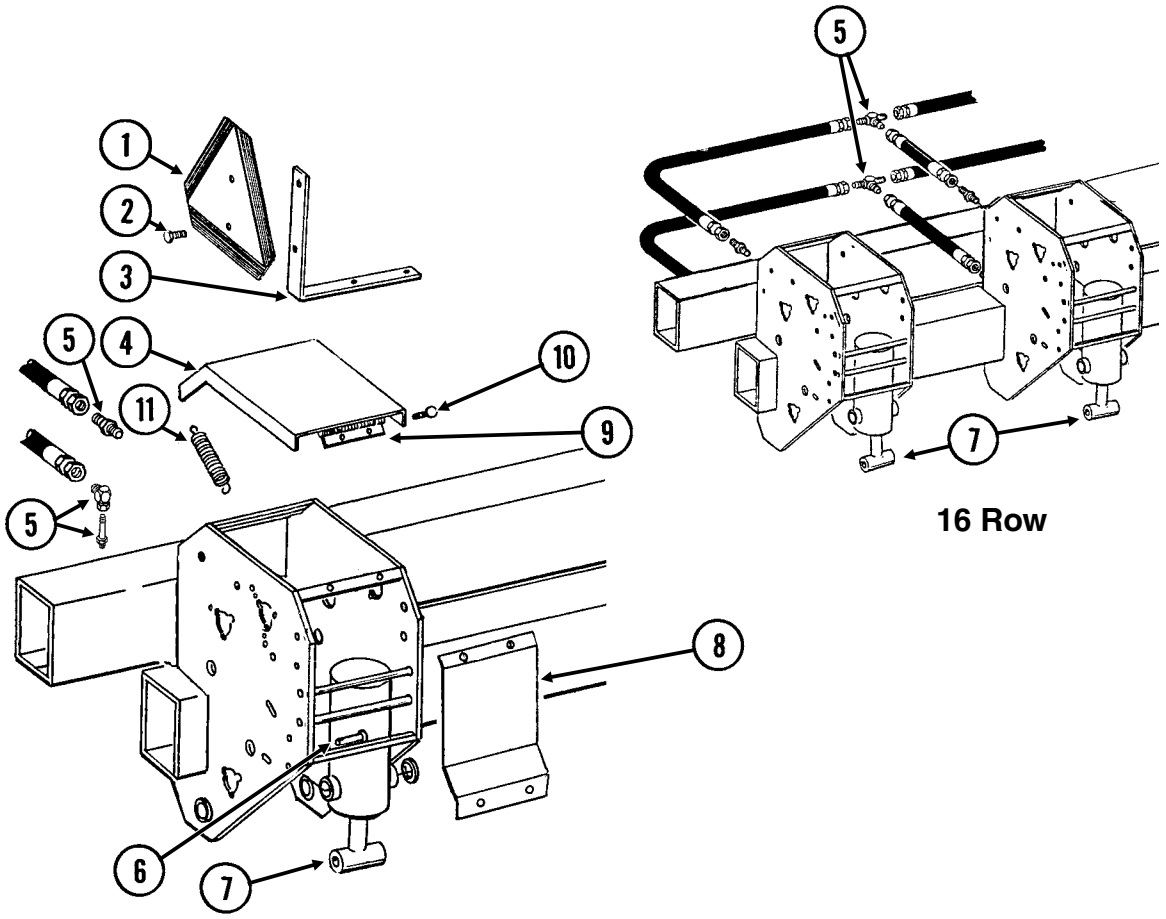
TRANSPORT WHEELS/ROCK GUARDS

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	G10448	2	Hex Head Cap Screw, 7/8"-9 x 2 1/2", Grade 8
	G10330	2	Lock Washer, 7/8"
2.	GA4727	1	Spindle W/Retaining Ring, 1 3/4"
	G10913	-	External Retaining Ring, 2 1/2"
3.	GA4722	2	Seal
4.	GA4723	2	Bearing
5.	GA4729	1	Hub W/Cups, Bolts, Nuts And Grease Fitting, 8 Bolt, 1 3/4" Bore
	G10640	-	Grease Fitting, 1/4"-28
	GD7079	-	Cup
	GR0528	-	Lug Bolt, 5/8"-12 x 2 1/4", Grade 8
6.	GD7089	1	Special Nut, 1 3/4"-12 UNF
7.	GD7864	1	Special Hex Nut, 1 3/4"-12 UNF
8.	GA9544	-	Rim, 5.5" x 22.5", All Sizes
9.	GD13409	-	Tire, 255-70R 22.5" W/O Center Rib, Tubeless (Specify Brand*)
10.	G10037	-	Hex Head Cap Screw, 1/2"-13 x 1 1/4"
	G10228	-	Lock Washer, 1/2"
	G10102	-	Hex Nut, 1/2"-13
11.	GA5716	-	Rock Guard (Optional)
12.	GA7434	-	Valve Stem
13.	GD18676	4	Lug Bolt, 5/8"-18 x 2 3/4"
14.	GD18643	1	Jump Start Wheel
15.	G10020	2	Hex Head Cap Screw, 1/4"-20 x 5/8"
	G10227	2	Lock Washer, 1/4"
	G10103	2	Hex Nut, 1/4"-20
16.	GD18646	1	Sensor Bracket Cover
17.	GA13204	1	Hall Effect Sensor
18.	GA13227	1	Sensor Bracket
A.	GA9545	-	Tire And Rim Assembly (Items 8, 9 And 12) (Specify Brand*)
B.	GA13214	-	Sensor Bracket Assembly (Items 15 - 18)

*** Specific brand requests will be supplied only as available from current KINZE® Repair Parts stock. If a specific brand requested is not in stock, the brand available will be supplied.**

WING WHEEL MODULE

(TWL110a)



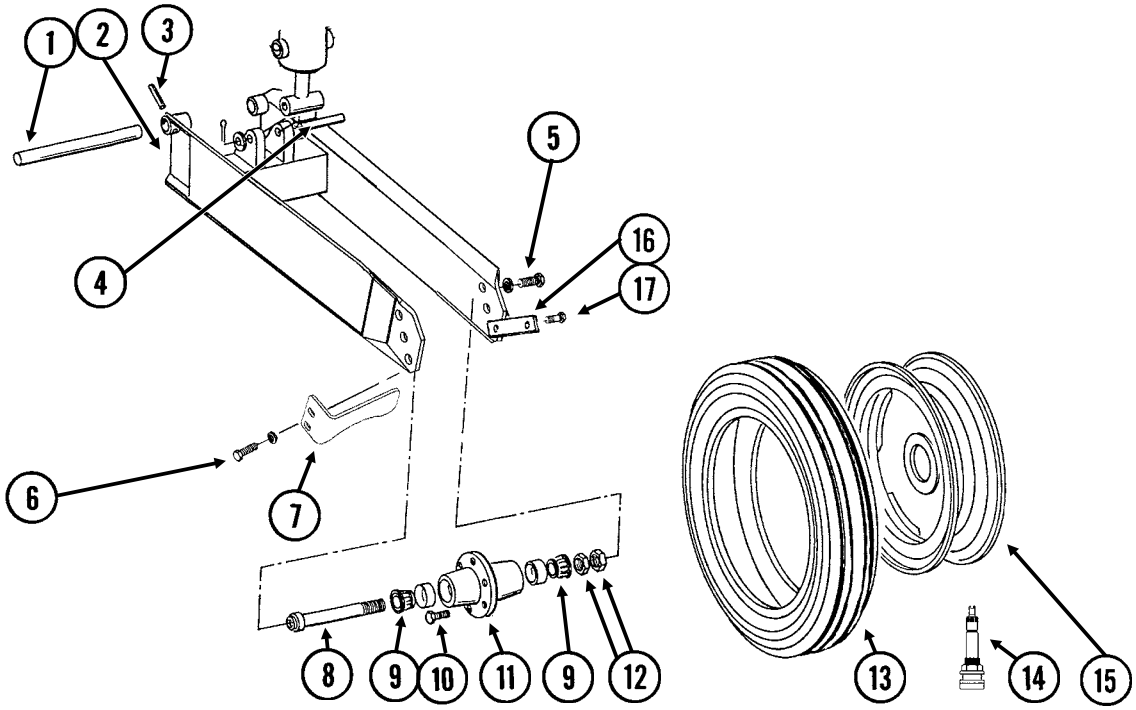
16 Row

12 Row

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GD2199	1	SMV Sign
2.	G10022	2	Hex Head Cap Screw, ¼"-20 x ½"
	G10227	2	Lock Washer, ¼"
	G10103	2	Hex Nut, ¼"-20
3.	GD9969	1	Bracket
4.	GD10298	1	Cover
5.		-	See “Hydraulic Hoses And Fittings On Planter Frame”, Pages P80 And P81
6.	G10870	1	Clevis Pin, ⅜" x 1"
	G10860	1	Retaining Ring, ⅜"
7.		-	See “Wing Lift Cylinder”, Page P65
8.	GD6895	1	Shield
9.	GD5789	1	Hinge, Female
	GD5790	1	Hinge W/Pins, Male
10.	G10064	6	Hex Head Cap Screw, ¼"-20 x 1"
	G10209	4	Washer, ¼" USS
	G10227	6	Lock Washer, ¼"
	G10103	6	Hex Nut, ¼"-20
11.	GD5857	1	Spring

GROUND DRIVE WHEEL

PTD057(TWL142c)

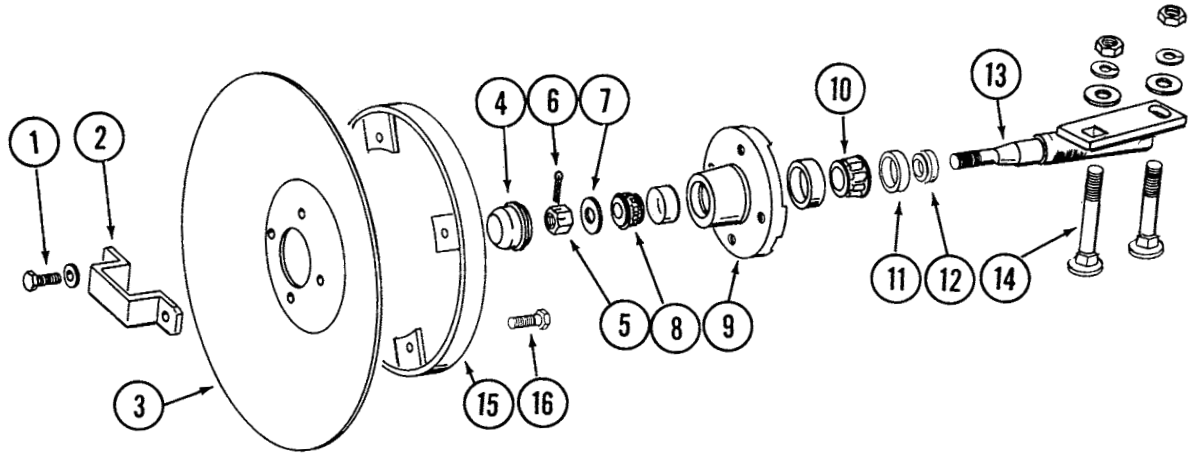


ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GD11695	-	Pin, 1 ¼" x 13 ¼"
2.	GA8677	1	Wheel Module
3.	G10610	-	Spring Pin, ⅜" x 2"
4.	GD5841	1	Pin, 1 ¼" x 5 ⅝"
	G10226	2	Washer, 1 ¼" SAE
	G10460	2	Cotter Pin, ¼" x 2"
5.	G10026	2	Hex Head Cap Screw, ¾"-10 x 2"
	G10231	2	Lock Washer, ¾"
6.	G10026	2	Hex Head Cap Screw, ¾"-10 x 2"
	G10231	2	Lock Washer, ¾"
	G10105	2	Hex Nut, ¾"-10
7.	GA13335	1	Scraper
8.	GA4376	1	Spindle W/Round External Retaining Ring, 10"
	GD11490	-	Round External Retaining Ring
9.	GA0895	2	Bearing
10.	GR0270	6	Lug Bolt, 9/16"-18
11.	GA2148	1	Hub W/Cups, 6 Bolt
	GR0434	-	Cup
12.	G11081	2	Hex Jam Nut, 1 ½"-12, Grade 2
13.	GD13401	1	Tire, 7.50" x 20", 8 Ply, Tubeless W/O Center Rib (Specify Brand*)
14.	GA7434	-	Valve Stem
15.	GA2908	1	Rim, 5.5" x 20"
16.	GD10144	1	Bar Clamp
17.	G10017	2	Hex Head Cap Screw, ½"-13 x 1 ½"
	G10228	2	Lock Washer, ½"
	G10102	2	Hex Nut, ½"-13
A.	GA7997	-	Tire And Rim Assembly (Specify Brand*)(Items 13-15)
B.	GA4377	-	Hub And Spindle Assembly (Items 8, 9, 11 And 12)

*** Specific brand requests will be supplied only as available from current KINZE® Repair Parts stock. If a specific brand requested is not in stock, the brand available will be supplied.**

ROW MARKER SPINDLE/HUB/BLADE

MKR020(MKR4)

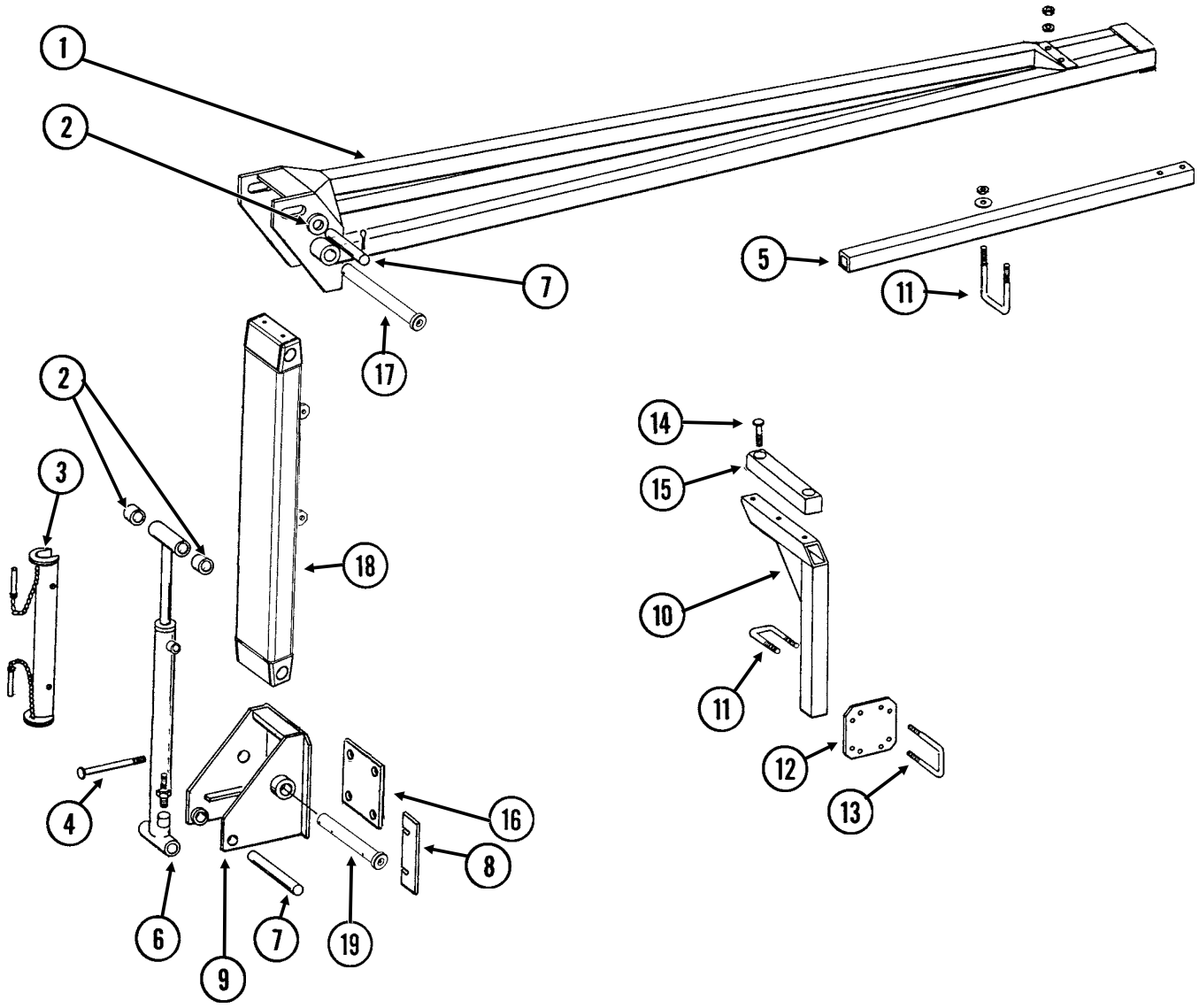


ROW MARKER SPINDLE/HUB/BLADE

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	G10722	4	Hex Head Cap Screw, ½"-20 x 1"
	G10228	4	Lock Washer, ½"
2.	GD2597	1	Retainer
3.	GD0746	1	Disc Blade, Solid, 16" (Shown)
	GD10283	-	Disc Blade, Notched, 16" (Optional)
4.	GD0840	1	Dust Cap
5.	G10725	1	Slotted Hex Nut, ⅝"-18
6.	G10544	1	Cotter Pin, 5⁄32" x 1"
7.	G10724	1	Washer, ⅝" SAE
8.	GA0257	1	Bearing
9.	GA0167	1	Hub W/Cups, 4 Bolt
	GR0151	-	Outer Cup
	GR0150	-	Inner Cup
10.	GA0245	1	Bearing
11.	GA0243	1	Grease Seal
12.	GA0899	1	Rubber Seal
13.	GA1676	1	Spindle, R.H.
	GA1677	-	Spindle, L.H. (Shown)
14.	G10844	2	Carriage Bolt, ½"-13 x 3 ½"
	G10168	2	Machine Bushing, ½", 7 Gauge
	G10228	2	Lock Washer, ½"
	G10102	2	Hex Nut, ½"-13
15.	GA5853	1	Depth Band
16.	G10019	4	Hex Head Cap Screw, 5⁄16"-18 x 1"
	G10109	4	Lock Nut, 5⁄16"-18, Grade 8
A.	GA1679	-	Hub And Spindle Assembly, L.H. (Items 1, 2 And 4-13)
	GA1678	-	Hub And Spindle Assembly, R.H. (Items 1, 2 And 4-13)

ROW MARKER ASSEMBLY, 12 ROW 30"

(MKR14j)

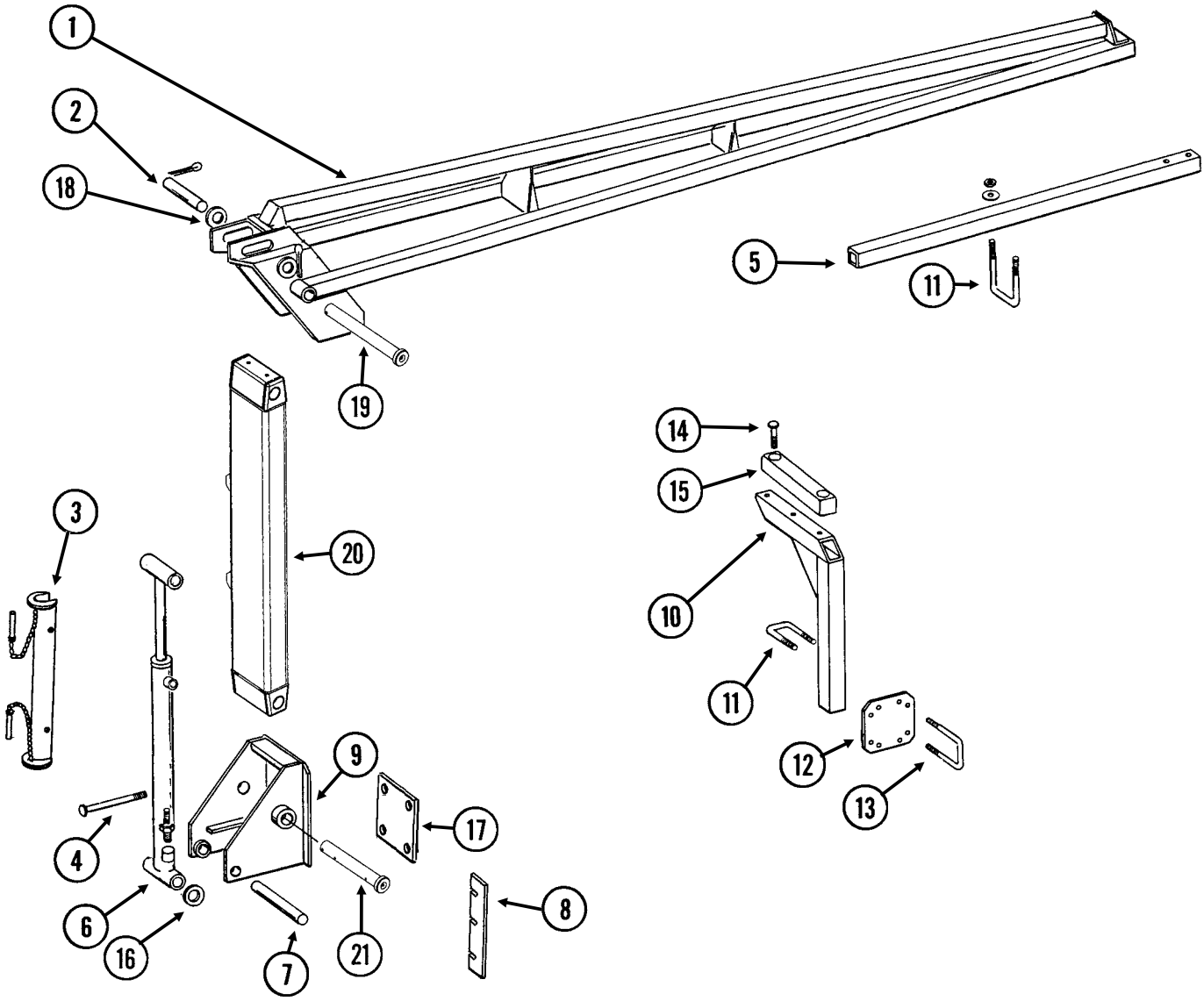


ROW MARKER ASSEMBLY, 12 ROW 30"

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GA4353	1	Arm W/Grease Fittings, Second Stage, 110"
	G10641	-	Grease Fitting, ⅛" NPT
2.	GD0752-41	4	Sleeve, 1"
3.	GA8170	1	Safety Lockup W/Detent Pins, 19 ⅜"
	G10536	-	Detent Pin, ½" x 2 ½" Grip
4.	G10011	4	Hex Head Cap Screw, ⅝"-11 x 5 ½" (If Applicable)
	G10046	-	Hex Head Cap Screw, ⅝"-11 x 5" (If Applicable)
	G10008	-	Hex Head Cap Screw, ⅝"-11 x 2" (If Applicable)
	GD7805	8	Special Washer, ⅝", Hardened
	G10205	-	Washer, ⅝" SAE
	G10230	4	Lock Washer, ⅝"
	G10104	4	Hex Nut, ⅝"-11
5.	GD0453-07	1	Extension Tube, 45"
	GD0453-04	-	Extension Tube, 60", (L.H. Even-Row Marker) (If Applicable)
6.		-	See “Row Marker (Cushion) Cylinder”, Page P69
7.	GD2161	2	Pin, 1 ¼" x 8 ¼"
	G10460	4	Cotter Pin, ¼" x 2"
8.	GD10792	-	Shim, 2 ½" x 7 ¼", 16 Gauge (As Required)
9.	GA5130	1	Mount
10.	GA7042	1	Stand, 20"
11.	GD2721	3	U-Bolt, 2" x 2" x ½"-13
	G10228	6	Lock Washer, ½"
	G10102	6	Hex Nut, ½"-13
12.	GD9981	1	Bar
13.	GD4743	2	U-Bolt, 3" x 3" x ½"-13
	G10216	4	Washer, ½" USS
	G10228	4	Lock Washer, ½"
	G10102	4	Hex Nut, ½"-13
14.	G10017	2	Hex Head Cap Screw, ½"-13 x 1 ½"
	G10206	2	Washer, ½" SAE
	G10111	2	Lock Nut, ½"-13
15.	GA9088	-	Molded Stop, 12 ¼" Long
16.	GD13360	2	Plate, 6" x 6"
17.	GA11766	-	Pin W/Grease Fitting, 1 ¼" x 11 13⁄16"
	G10640	-	Grease Fitting, ¼"-28
	GD16999	-	Marker Pin
18.	GA11590	-	Arm, First Stage
19.	GA11767	-	Pin W/Grease Fitting, 1 ¼" x 9 ½"
	G10640	-	Grease Fitting, ¼"-28
	GD16999	-	Marker Pin

ROW MARKER ASSEMBLY, 16 ROW 30"

(MKR15k)

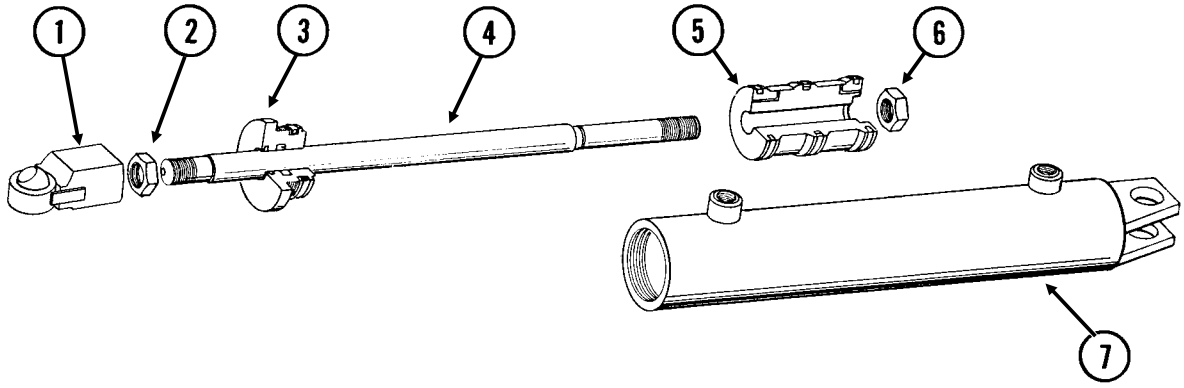


ROW MARKER ASSEMBLY, 16 ROW 30"

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GA7118	-	Arm, Second Stage, 172 ¼", 16 Row
2.	GD1701	1	Pin, 1 ¼" x 6 ½"
	G10460	2	Cotter Pin, ¼" x 2"
3.	GA8170	1	Safety Lockup W/Detent Pins, 19 ⅜"
	G10536	-	Detent Pin, ½" x 2 ½" Grip
4.	G10012	-	Hex Head Cap Screw, ⅝"-11 x 6 ½" (If Applicable)
	G10009	-	Hex Head Cap Screw, ⅝"-11 x 2 ½" (If Applicable)
	GD7805	8	Special Washer, ⅝", Hardened
	G10230	6	Lock Washer, ⅝"
	G10104	6	Hex Nut, ⅝"-11
5.	GD0453-09	1	Extension Tube, 75, 16 Row (L.H. Even-Row Marker) (If Applicable)
	GD0453-03	-	Extension Tube, 50", 16 Row
6.		-	See “Row Marker (Cushion) Cylinder”, Page P69
7.	GD0652	1	Pin, 1 ¼" x 9 ½"
	G10460	2	Cotter Pin, ¼" x 2"
8.	GD10793	-	Shim, 2 ½" x 12 ½", 16 Gauge (As Required) (Shown)
	GD11791	-	Shim, 2 ½" x 8 ¼", 16 Gauge (As Required)
9.	GA4877	1	Mount
10.	GA7043	1	Stand, 30"
11.	GD2721	3	U-Bolt, 2" x 2" x ½"-13
	G10228	6	Lock Washer, ½"
	G10102	6	Hex Nut, ½"-13
12.	GD9981	1	Bar
13.	GD4743	2	U-Bolt, 3" x 3" x ½"-13
	G10216	4	Washer, ½" USS
	G10228	4	Lock Washer, ½"
	G10102	4	Hex Nut, ½"-13
14.	G10017	2	Hex Head Cap Screw, ½"-13 x 1 ½"
	G10206	2	Washer, ½" SAE
	G10111	2	Lock Nut, ½"-13
15.	GA9088	-	Molded Stop, 12 ¼" Long
16.	G10979	4	Special Washer, 1 ¼" (As Required)
17.	GD13359	2	Plate, 7" x 7"
18.	G10226	2	Washer, 1 ¼" SAE
	G10322	2	Machine Bushing, 1 ¼", 18 Gauge
19.	GA11768	-	Pin W/Grease Fitting, 1 ¼" x 13"
	G10640	-	Grease Fitting, ¼"-28
	GD17001	-	Marker Pin
20.	GA11569	-	Arm, First Stage, L.H. (Shown)
	GA11568	-	Arm, First Stage, R.H.
21.	GA11769	-	Pin W/Grease Fitting, 1 ¼" x 11 ½"
	G10640	-	Grease Fitting, ¼"-28
	GD17003	-	Marker Pin

ROTATION CYLINDER, ALL SIZES

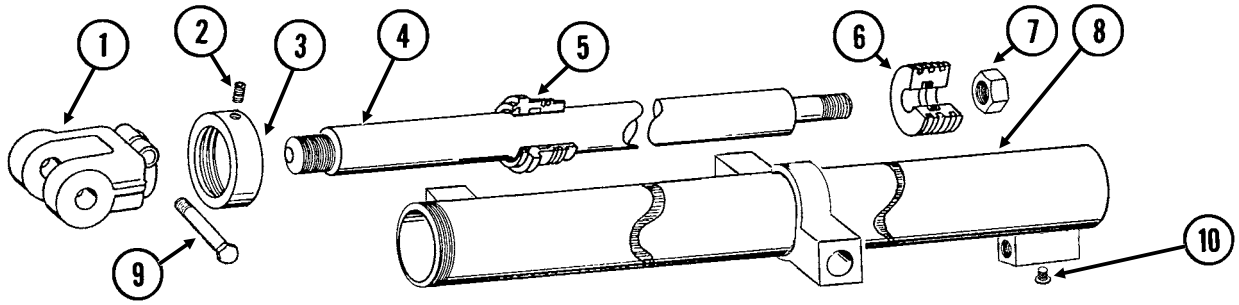
(CYL11i)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA7221	1	Threaded Ball Joint End
2.	G10509	1	Hex Jam Nut, 1 ¼"-12, Grade 2
3.	GD11988	1	Gland
4.	GD11991	1	Rod
5.	GD11992	1	Piston
6.	G10972	1	Lock Nut, 1 ¼"-12
7.	A7220	1	Barrel **(Non-Stock Item)**
A.	GA8904	-	Cylinder Complete, 4" x 16" *(Part Number Stamped On Barrel)*
B.	GR1524	-	Seal Kit, Includes: (2) O-Rings, (1) U-Cup, (1) Wiper, (1) Seal, (2) Cast Iron Rings, (1) BU Ring, (1) Expander

CENTER LIFT CYLINDER, ALL SIZES

(CYL39c)

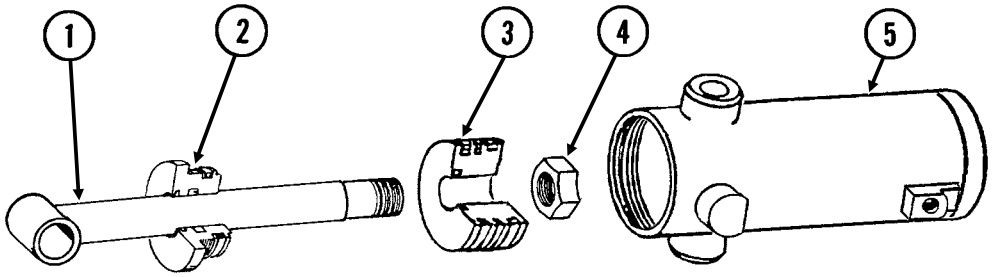


Port Type Rephasing

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD11951	1	Clevis
2.	G10907	1	Set Screw, ¼"-20 x ¼"
3.	GD11193	1	Cap
4.	GD10936	1	Rod
5.	GD10211	1	Gland
6.	GD11253	1	Piston
7.	G10958	1	Lock Nut, 1"-14
8.	GA8149	1	Barrel
9.	G10939	1	Hex Head Cap Screw, ⅜"-16 x 2 ¼"
	G10108	1	Lock Nut, ⅜"-16
10.	G6408-H04-O	1	Hex Socket Head Plug W/O-Ring, 7⁄16"-20 O-Ring
	GR1465	1	O-Ring
A.	GA8908	-	Cylinder Complete, 3" x 48" *(Part Number Stamped On Barrel)*
B.	GR1428	-	Seal Kit, Includes: (2) O-Rings, (2) BU Rings, (1) Wiper, (1) U-Cup, (1) Piston Seal, (2) Cast Iron Rings, (1) Expander

WING LIFT CYLINDER, 12 ROW

CYL031/CYL011(CYL45d)

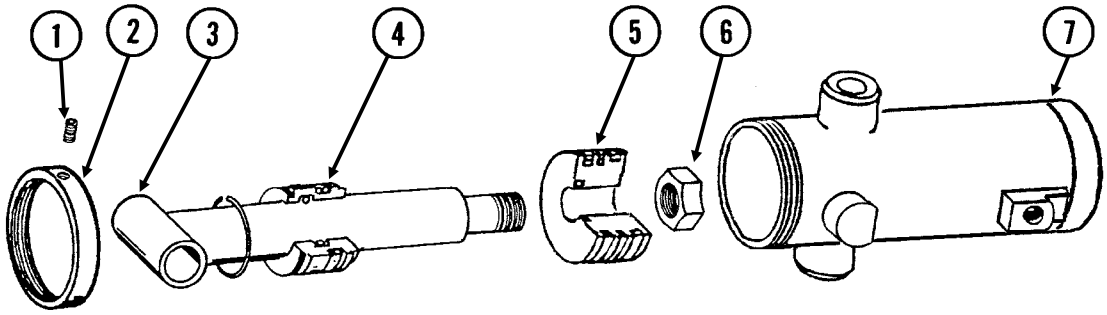


Port Type Rephasing

ITEM	PART NO.	QTY	DESCRIPTION
1.	GA8320	1	Rod Assembly W/Grease Fitting
	G10640	-	Grease Fitting, ¼"-28
2.	GD11995	1	Gland
3.	GD11994	1	Piston
4.	G10958	1	Lock Nut, 1"-14
5.	A8797	1	Barrel **(Non-Stock Item)**
A.	GA8909	-	Cylinder Complete, 4 ¼" x 6" *(Part Number Stamped On Barrel)*
B.	GR1523	-	Seal Kit, Includes: (1) Wiper, (2) O-Rings, (1) BU Ring, (1) U-Cup, (1) Seal, (2) Cast Iron Rings, (1) Expander

WING LIFT CYLINDER, 16 ROW

CYL031/CYL011(CYL41c)

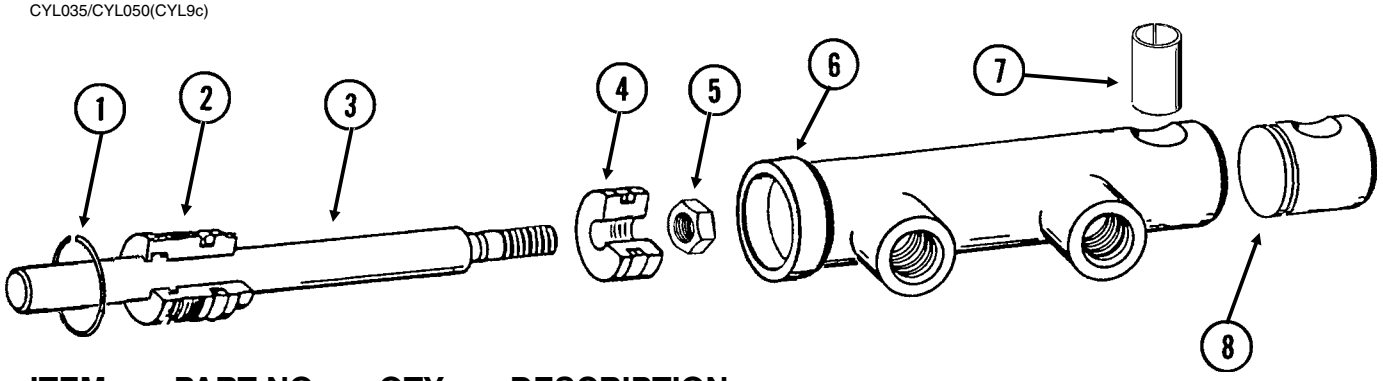


Port Type Rephasing

ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10907	1	Set Screw, ¼"-20 x ¼"
2.	GD11193	1	Cap
3.	GA8157	1	Rod Assembly W/Grease Fitting
	G10449	-	Grease Fitting, 3⁄16", Drive-In
4.	GD11194	1	Gland
5.	GD11253	1	Piston
6.	G10958	1	Lock Nut, 1"-14
7.	A8873	1	Barrel **(Non-Stock Item)**
A.	GA8874	-	Cylinder Complete, 3" x 6" *(Part Number Stamped On Barrel)*
B.	GR1417	-	Seal Kit, Includes: (2) O-Rings, (2) BU Rings, (1) Expander, (1) Wiper, (1) U-Cup, (1) Piston Seal, (2) Cast Iron Rings

TRANSPORT LATCH CYLINDER, ALL SIZES

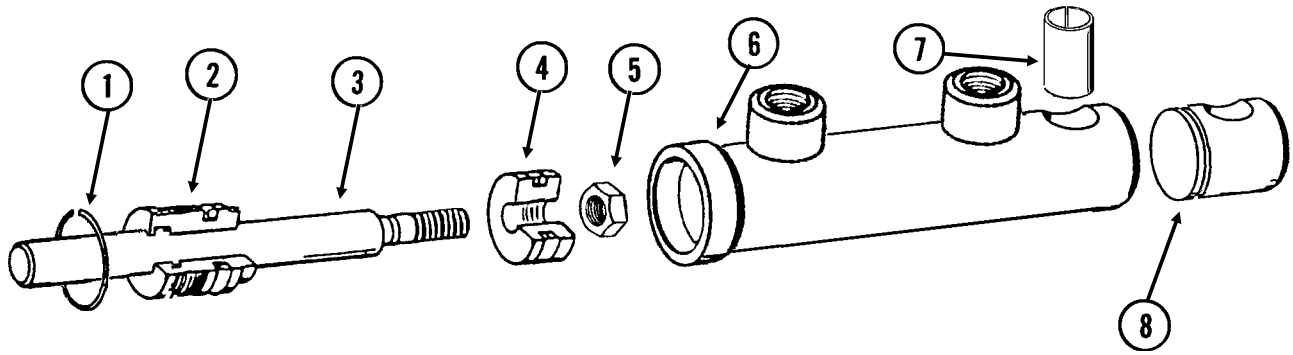
CYL035/CYL050(CYL9c)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10770	1	Internal Retaining Ring, 1 11⁄16"
2.	GD13170	1	Gland
3.	GD13425	1	Rod
4.	GD13172	1	Piston
5.	G11016	1	Lock Nut, ½"-20
6.	D13426	1	Barrel **(Non-Stock Item)**
7.	GD13400	1	Tension Bushing, 1" x 2" Long
8.	GD13173	1	End Cap
A.	GA9559	-	Cylinder Complete, 1 ½" x 2 ½" *(Part Number Stamped On Barrel)*
B.	GR1598	-	Seal Kit, Includes: (3) O-Rings, (2) BU Rings, (1) Wiper, (1) T-Seal, (1) Bronze Bushing, (1) Seal, (1) U-Cup

TONGUE LOCK CYLINDER, ALL SIZES

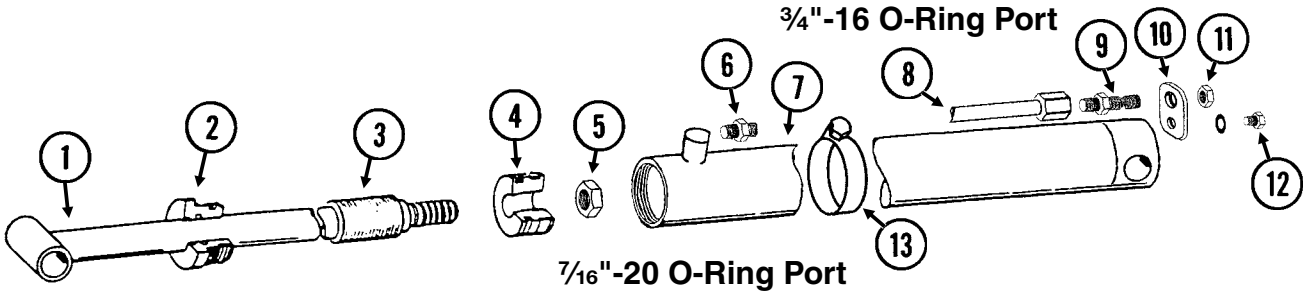
CYL035(CYL9d)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10770	1	Internal Retaining Ring, 1 11⁄16"
2.	GD13170	1	Gland
3.	GD13171	1	Rod
4.	GD13172	1	Piston
5.	G11016	1	Lock Nut, ½"-20
6.	D13169	1	Barrel **(Non-Stock Item)**
7.	GD13400	1	Tension Bushing, 1" x 2" Long
8.	GD13173	1	End Cap
A.	GA9205	-	Cylinder Complete, 1 ½" x 2 ½" *(Part Number Stamped On Barrel)*
B.	GR1598	-	Seal Kit, Includes: (3) O-Rings, (2) BU Rings, (1) Wiper, (1) T-Seal, (1) Bronze Bushing, (1) Seal, (1) U-Cup

TONGUE CYLINDER, 12 ROW

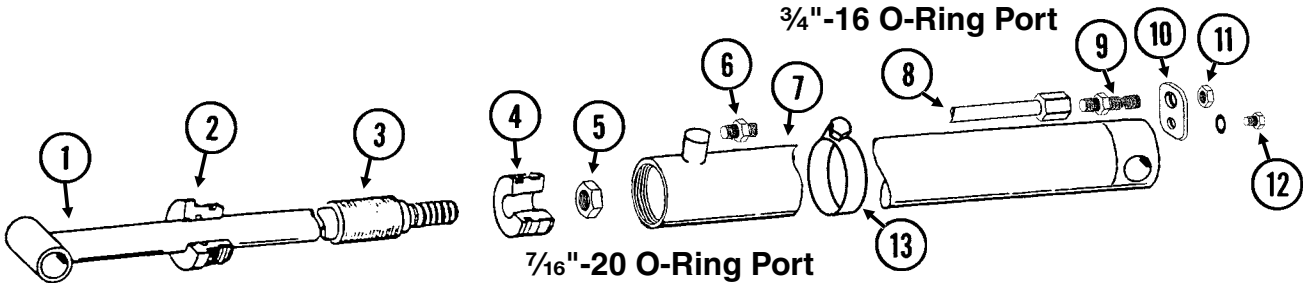
(CYL12f)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA8893	1	Rod Assembly
2.	GD11984	1	Gland
3.	GD7147	1	Spacer
4.	GD11970	1	Piston
5.	G10972	1	Lock Nut, 1 ¼"-12
6.	G6400-08-04	1	Connector W/O-Ring, ¾"-16 Male JIC To 7/16"-20 O-Ring
	GR1465	-	O-Ring
7.	GA8858	1	Barrel
8.	GA8978	1	Steel Hydraulic Line, 68 11/16"
9.	G2700-08	1	Bulkhead Tube Union, ¾"-16 Male JIC
10.	GD12597	1	Bracket
11.	G306-08	1	Lock Nut, ¾"-16
12.	G10328	1	Hex Head Cap Screw, ⅜"-16 x ⅝"
	G10229	1	Lock Washer, ⅜"
13.	G10990	1	Hose Clamp, No. 52
A.	GA8857	-	Cylinder Complete, 3" x 60" *(Part Number Stamped On Barrel)*
B.	GR1519	-	Seal Kit, Includes: (2) O-Rings, (1) BU Ring, (1) Wear Ring, (1) Wiper, (1) U-Cup, (1) T-Seal

TONGUE CYLINDER, 16 ROW

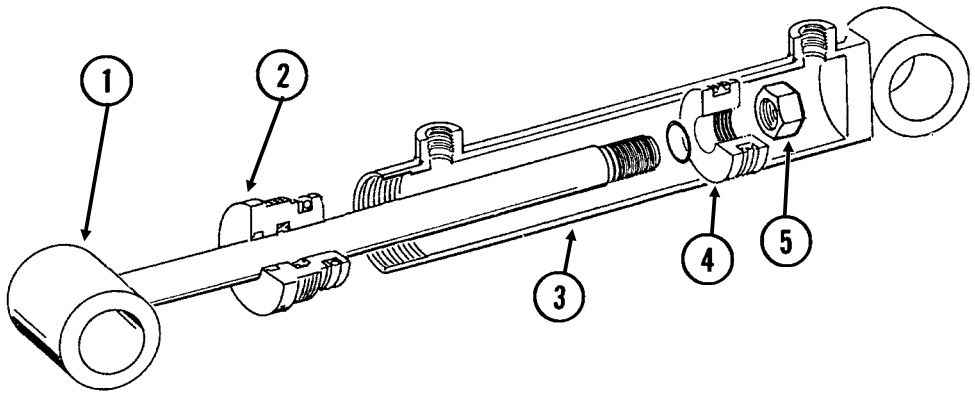
CYL036(CYL12f)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA8859	1	Rod Assembly
2.	GD11984	1	Gland
3.	GD7147	1	Spacer
4.	GD11970	1	Piston
5.	G10972	1	Lock Nut, 1 ¼"-12
6.	G6400-08-04	1	Connector W/O-Ring, ¾"-16 Male JIC To 7/16"-20 O-Ring
	GR1465	-	O-Ring
7.	GA8861	1	Barrel
8.	GA8979	1	Steel Hydraulic Line, 92 11/16"
9.	G2700-08	1	Bulkhead Tube Union, ¾"-16 Male JIC
10.	GD12597	1	Bracket
11.	G306-08	1	Lock Nut, ¾"-16
12.	G10328	1	Hex Head Cap Screw, ⅜"-16 x ⅝"
	G10229	1	Lock Washer, ⅜"
13.	G10990	1	Hose Clamp, No. 52
A.	GA8862	-	Cylinder Complete, 3" x 84" *(Part Number Stamped On Barrel)*
B.	GR1519	-	Seal Kit, Includes: (2) O-Rings, (1) BU Ring, (1) Wear Ring, (1) Wiper, (1) U-Cup, (1) T-Seal

WING LOCK CYLINDER, ALL SIZES

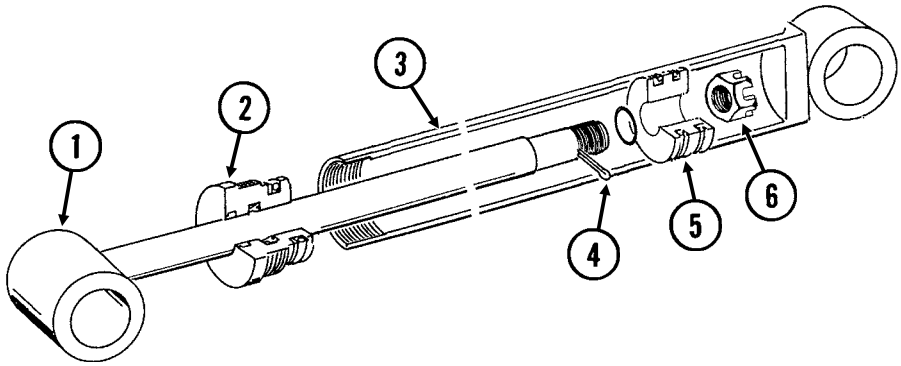
CYL032(CYL3f)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA8898	1	Rod Assembly
2.	GD11985	1	Gland
3.	A8822	1	Barrel **(Non-Stock Item)**
4.	GD11986	1	Piston
5.	G10969	1	Lock Nut, ⅞"-14
A.	GA8899	-	Cylinder Complete, 2 ½" x 20 1⁄16" *(Part Number Stamped On Barrel)*
B.	GR1522	-	Seal Kit, Includes: (1) T-Seal, (2) O-Rings, (1) BU Ring, (1) U-Cup, (1) Wiper

ROW MARKER (Cushion) CYLINDER, ALL SIZES

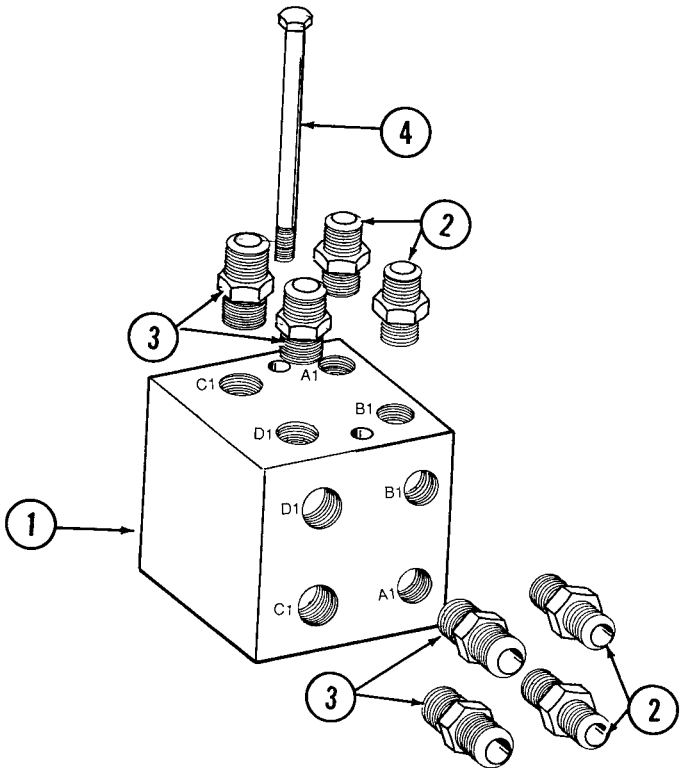
(CYL3d)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA8871	1	Rod Assembly
2.	GD10207	1	Gland
3.	A7524	1	Barrel **(Non-Stock Item)**
4.	G10827	1	Cotter Pin, ⅛" x 1 ¾"
5.	GD11983	1	Piston
6.	G10962	1	Slotted Hex Nut, ⅞"-14
A.	GA8895	-	Cylinder Complete, 2 ½" x 20 1⁄16" *(Part Number Stamped On Barrel)*
B.	GR1521	-	Seal Kit, Includes: (1) T-Seal, (2) O-Rings, (1) BU Ring, (1) Cast Iron Ring, (1) Wiper, (1) U-Cup

JUNCTION BLOCK - LOCATED ON R.H. SIDE OF CENTER PIVOT

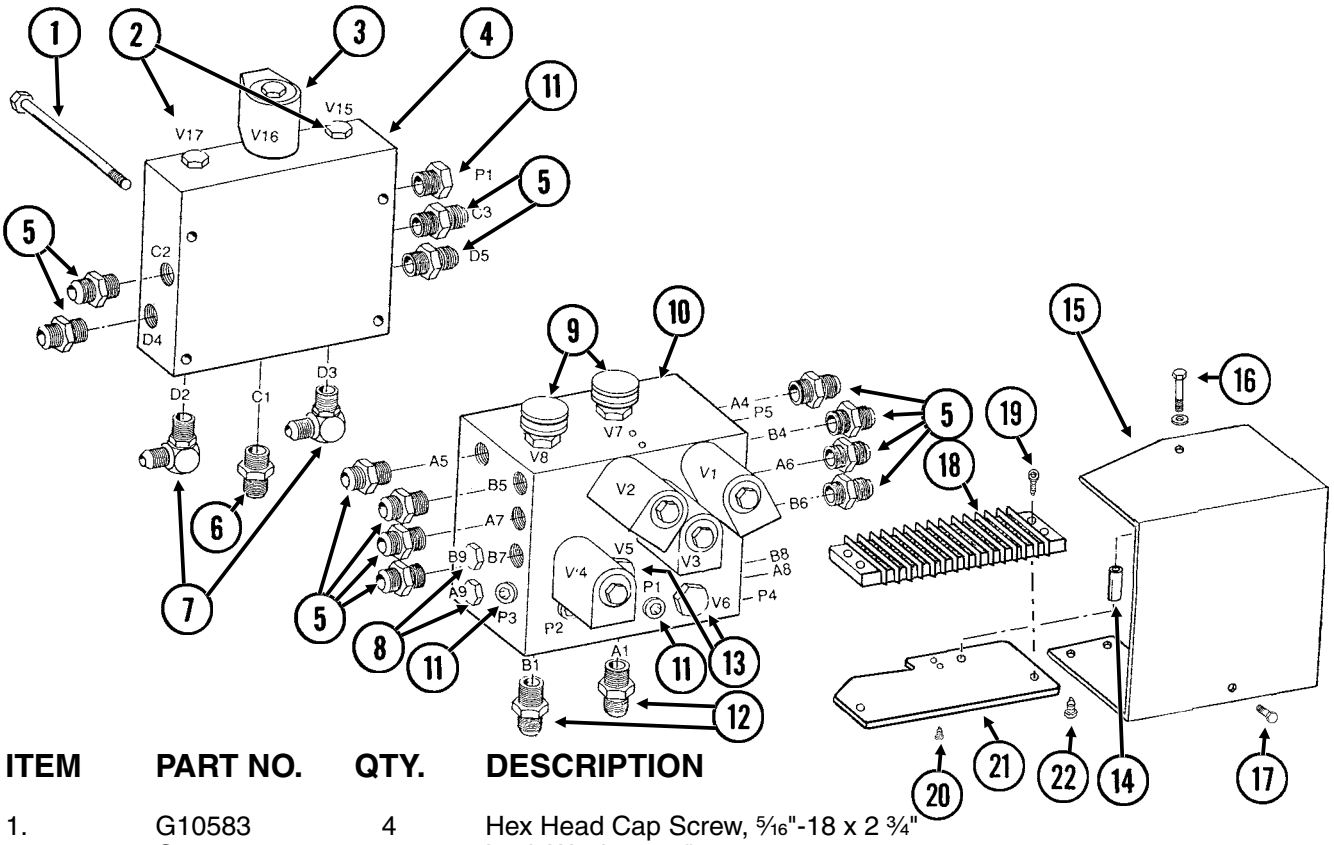
VVB036(TWL24)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD9971	1	Manifold Block
2.	G6400-08	4	Connector W/O-Ring, ¾"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
3.	G6400-10-08	4	Connector W/O-Ring, ⅞"-14 Male JIC To ¾"-16 O-Ring
	GR1037	-	O-Ring
4.	G10172	2	Hex Head Cap Screw, ⅜"-16 x 5"
	G10229	2	Lock Washer, ⅜"
	G10101	2	Hex Nut, ⅜"-16

VALVE BLOCKS - LOCATED ON R.H. REAR CENTER FRAME

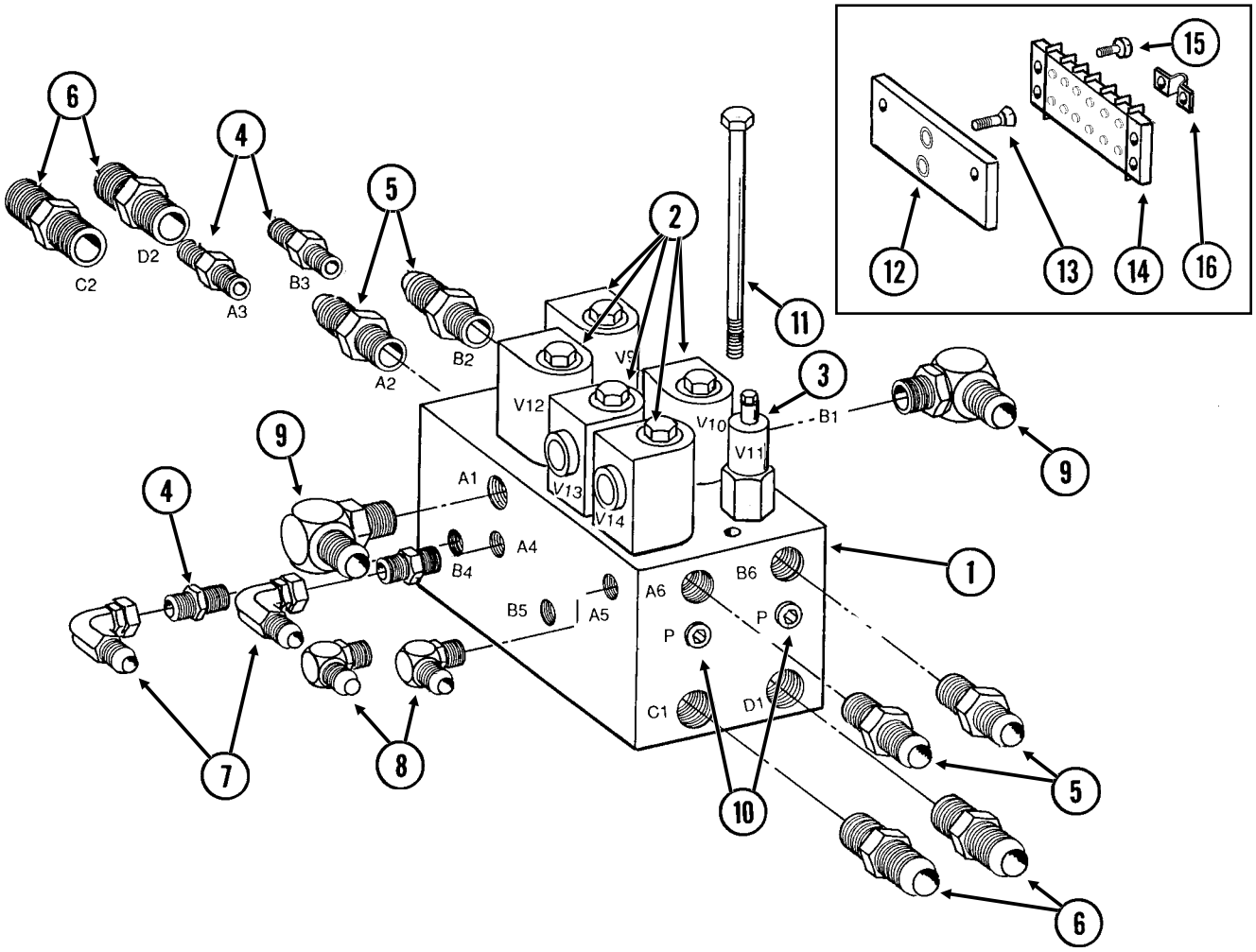
VVB034(TWL25e)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10583	4	Hex Head Cap Screw, 5/16"-18 x 2 3/4"
	G10232	4	Lock Washer, 5/16"
2.		2	See “Check Valve”, Page P77
3.		5	See “Solenoid Valve”, Page P76
24.	GD9977	1	Block
5.	G6400-08	12	Connector W/O-Ring, 3/4"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
6.	G6400-10	1	Connector W/O-Ring, 7/8"-14 Male JIC To O-Ring
	GR1466	-	O-Ring
7.	G6801-08-10	2	Elbow W/O-Ring, 90°, 3/4"-16 Male JIC To 7/8"-14 O-Ring
	GR1466	-	O-Ring
8.	G6408-08	4	Plug W/O-Ring, 3/4"-16 O-Ring
	GR1037	-	O-Ring
9.		2	See “Flow Control Valve”, Page P76
10.	GD9533	1	Block
11.	G6408-H06-O	6	Hex Socket Head Plug W/O-Ring, 9/16"-18 O-Ring
	GR1045	-	O-Ring
12.	G6400-08-10	2	Connector W/O-Ring, 3/4"-16 Male JIC To 7/8"-14 O-Ring
	GR1466	-	O-Ring
13.	G6408-10	2	Plug W/O-Ring, 7/8"-14 O-Ring
	GR1466	-	O-Ring
14.	GD8066-02	1	Sleeve, 1" Long
15.	GD13146	1	Cover
16.	G10133	1	Hex Head Cap Screw, 5/16"-18 x 1 1/2"
	G10232	1	Lock Washer, 5/16"
17.	G10054	1	Hex Head Cap Screw, 5/16"-18 x 1/2"
	G10232	1	Lock Washer, 5/16"
	G10106	1	Hex Nut, 5/16"-18
18.	GA9097	1	Terminal Strip W/Screws, No. 6, 14 Terminal
	GR1635	-	Screw, No. 6-32 x 1/4"
19.	G11067	2	Phillips Pan Head Machine Screw, No. 8-32 x 3/4", Stainless Steel
20.	G11066	2	Phillips Pan Head Machine Screw, No. 10-24 x 3/4", Stainless Steel
21.	GA9095	1	Terminal Strip Mount
22.	G10977	2	Phillips Pan Head Machine Screw, No. 10-24 x 1/2", Stainless Steel

VALVE BLOCK - LOCATED ON HITCH

VVB035(TWL26f)

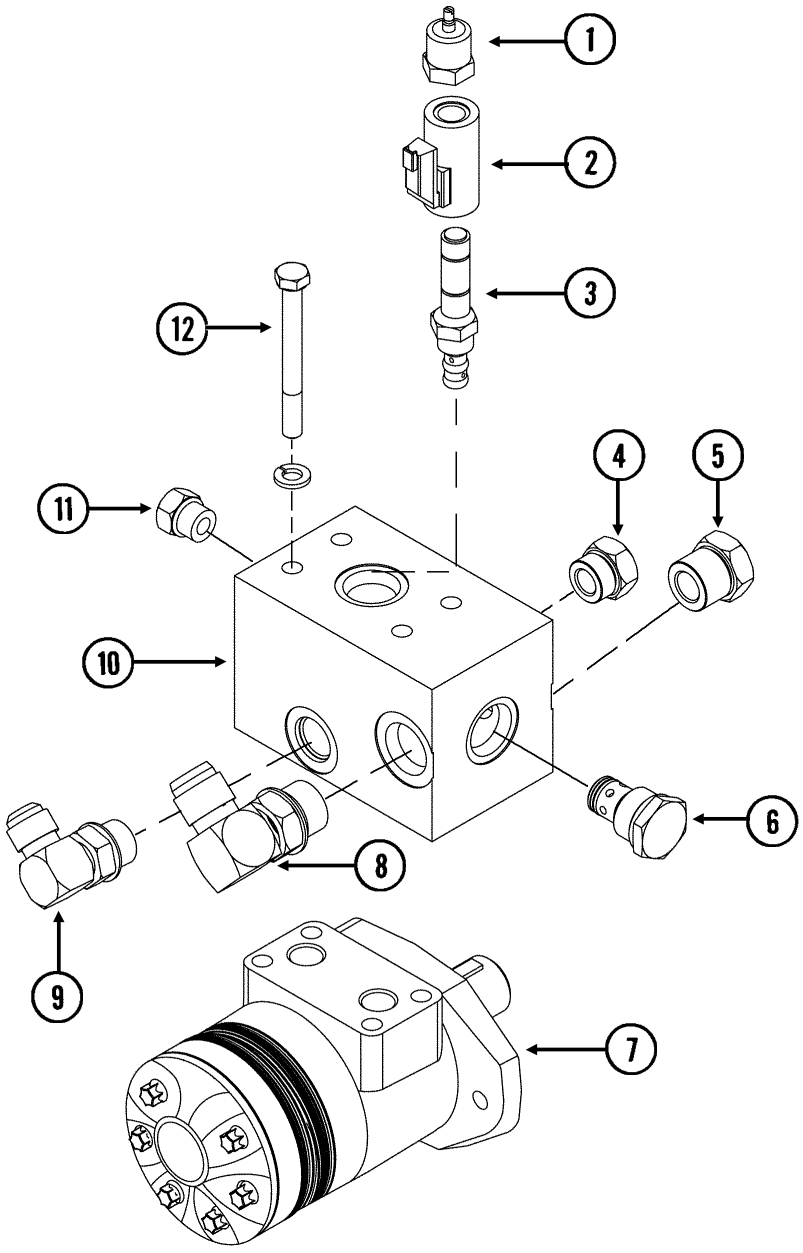


VALVE BLOCK - LOCATED ON HITCH

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD9905	1	Block
2.		-	See “Solenoid Valve”, Page P76
3.		-	See “Pressure Relief Valve”, Page P77
4.	G6400-06	4	Connector W/O-Ring, 9⁄16"-18 Male JIC To O-Ring
	GR1045	-	O-Ring
5.	G6400-08	4	Connector W/O-Ring, 3⁄4"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
6.	G6400-10	4	Connector W/O-Ring, 7⁄8"-14 Male JIC To O-Ring
	GR1466	-	O-Ring
7.	G6500-06	2	Swivel Elbow, 90°, 9⁄16"-18 Male JIC To Female
8.	G6801-06	2	Elbow W/O-Ring, 90°, 9⁄16"-18 Male JIC To O-Ring
	GR1045	-	O-Ring
9.	G6801-08	2	Elbow W/O-Ring, 90°, 3⁄4"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
10.	G6408-H06-O	2	Hex Socket Head Plug W/O-Ring, 9⁄16"-18 O-Ring
	GR1045	-	O-Ring
11.		-	See “Hose Take-Up”, Pages P42 And P43
12.	GD12818	-	Terminal Strip Mount
13.	G11068	2	Phillips Flat Head Machine Screw, No. 10-24 x 5⁄8", Stainless Steel
14.	GA9098	-	Terminal Strip W/Screws, No. 6, 8 Terminal
	GR1635	-	Screw, No. 6-32 x 1⁄4"
15.	G11065	2	Phillips Pan Head Machine Screw, No. 8-32 x 5⁄8", Stainless Steel
16.		-	See “Electrical Components”, Pages P84 And P85

VALVE BLOCK - LOCATED ON L.H. REAR CENTER FRAME

(PNE39)



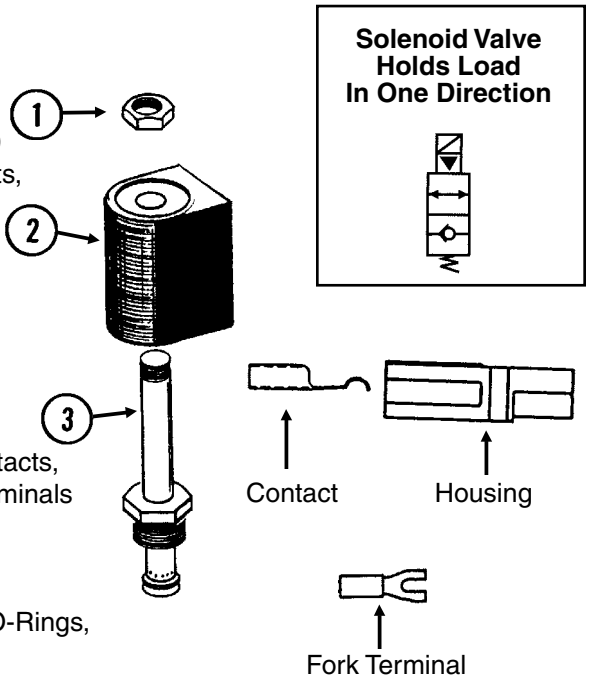
VALVE BLOCK - LOCATED ON L.H. REAR CENTER FRAME

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR1846	1	Manual Override
2.	GA13079	1	Coil
3.			See “Proportional Valve”, Page P77
4.	G6408-H08-00	1	Hex Socket Head Plug W/O-Ring, ¾"-16 O-Ring
5.	G6408-H10-00		Hex Socket Head Plug W/O-Ring, ⅞"-14 O-Ring
6.			See “Check Valve”, Page P77
7.	GA13219	1	Hydrualic Motor
8.	G6801-10	1	Elbow W/O-Ring, 90°, ⅞"-14 Male JIC To O-Ring
	GR1466	-	O-Ring
9.	G6801-08	1	Elbow W/O-Ring, 90°, ¾"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
10.	GD18512	1	Valve Block
11.	G6408-H06-00	1	Hex Socket Head Plug W/O-Ring, 9⁄16"-18 O-Ring
12.	G10936	4	Hex Head Cap Screw, 5⁄16"-18 x 3 ½"
	G10232	4	Lock Washer, 5⁄16"

SOLENOID VALVE

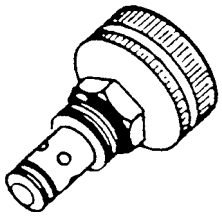
VVB019(TWL27c/TWL18/PLTR75c/A9481)

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR0761	1	Special Hex Nut, ½"-20
2.	G1K274	1	Coil Kit W/Coil, Contacts, Housings And Fork Terminals
	GD9529	2	Housing, Black
	GD9530	2	Contact
	G10996	2	Fork Terminal
3.	GR0763	1	Cartridge
A.	G1K275	-	Solenoid Valve Kit W/Solenoid Valve, Contacts, Housings And Fork Terminals
	GD9529	2	Housing, Black
	GD9530	2	Contact
	G10996	2	Fork Terminal
B.	GR0764	-	Seal Kit, Includes: (2) O-Rings, (1) BU Ring



FLOW CONTROL VALVE

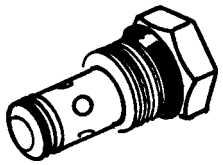
VVB020(TWL28)



ITEM	PART NO.	QTY.	DESCRIPTION
A.	GA3413	-	Flow Control Valve
B.	GR0764	-	Seal Kit, Includes: (2) O-Rings, (1) BU Ring

CHECK VALVE

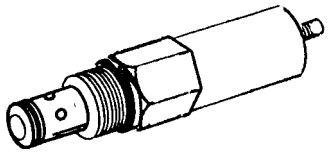
VVB020(TWL30)



ITEM	PART NO.	QTY.	DESCRIPTION
A.	GA4293	-	Check Valve
B.	GR0764	-	Seal Kit, Includes: (2) O-Rings, (1) BU Ring

PRESSURE RELIEF VALVE

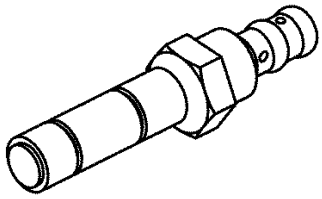
VVB020(TWL29)



ITEM	PART NO.	QTY.	DESCRIPTION
A.	GA3407	-	Pressure Relief Valve, 1000 PSI
B.	GR0764	-	Seal Kit, Includes: (2) O-Rings, (1) BU Ring

PROPORTIONAL VALVE

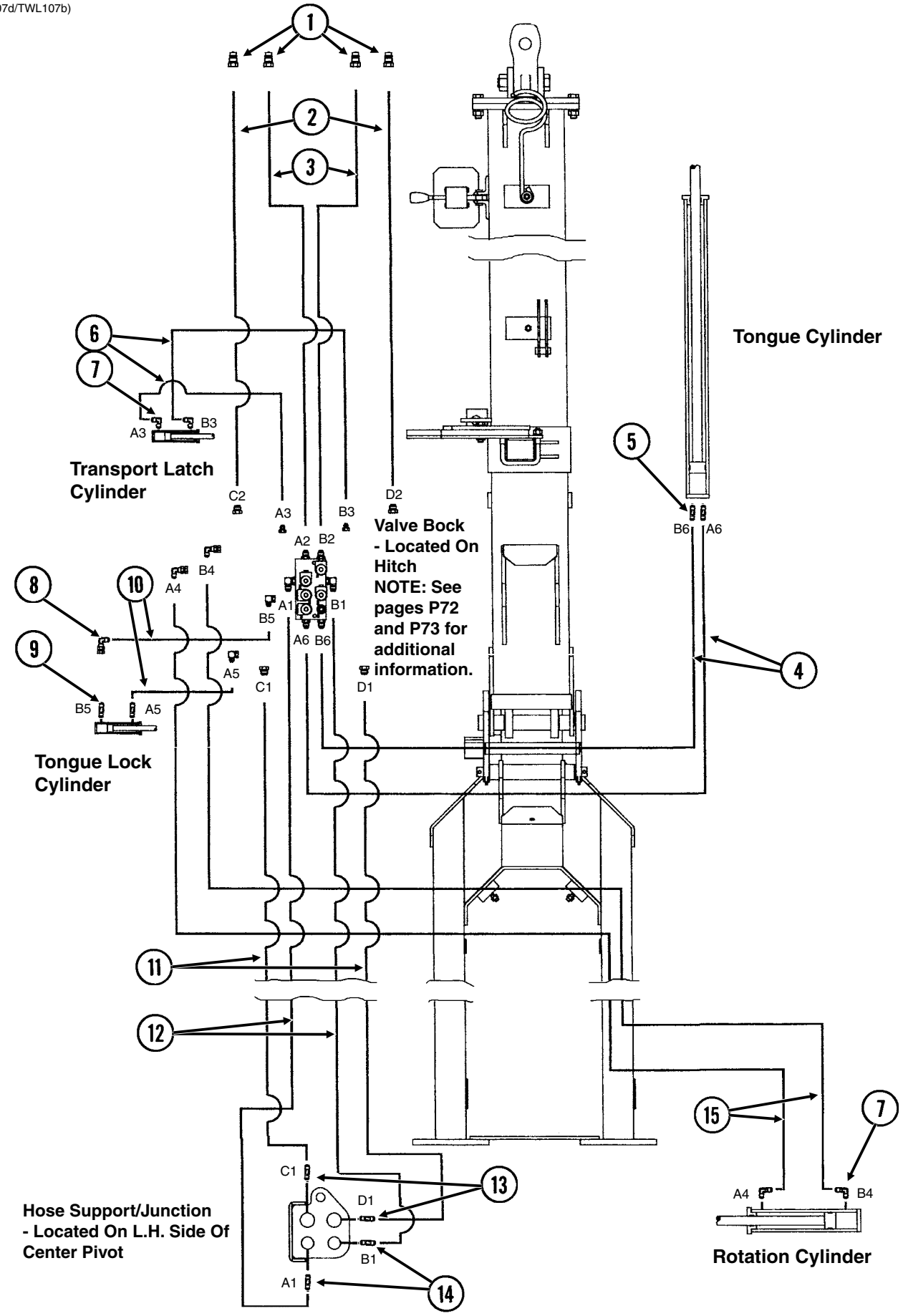
(TWL322)



ITEM	PART NO.	QTY.	DESCRIPTION
A.	GA13078	-	Proportional Valve
B.	GR0764	-	Seal Kit, Includes: (2) O-Rings, (1) BU Ring

HYDRAULIC HOSES AND FITTINGS ON HITCH

(TWL107d/TWL107b)



HYDRAULIC HOSES AND FITTINGS ON HITCH

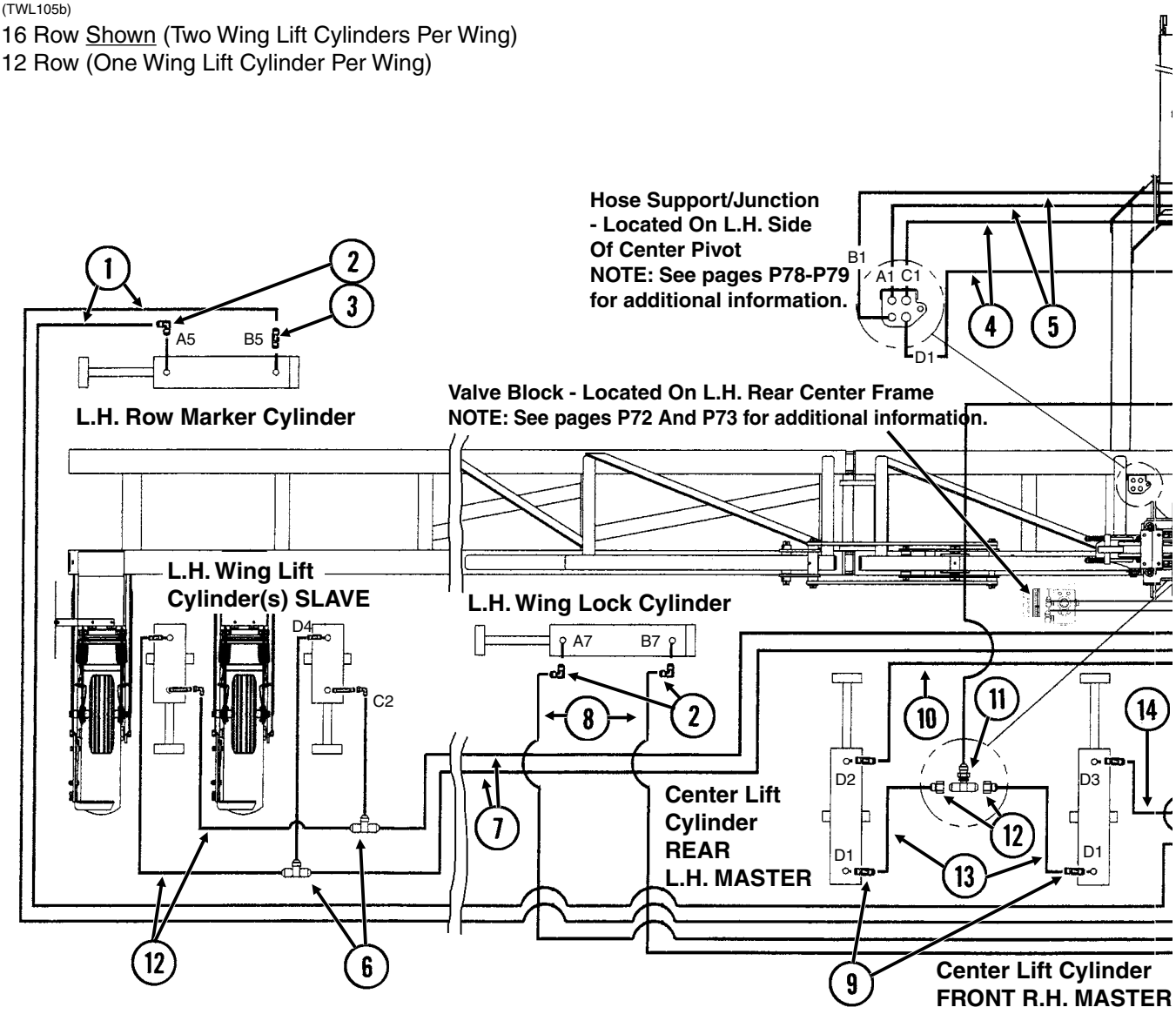
ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD4086	4	ISO Coupler
2.	*A1489	2	Hose Assembly, ½" x 191", 12 Row
	*A1491	2	Hose Assembly, ½" x 246", 16 Row
3.	*A3133	2	Hose Assembly, ⅜" x 191", 12 Row
	*A3183	2	Hose Assembly, ⅜" x 246", 16 Row
4.	*A3156	2	Hose Assembly, ⅜" x 68", 12 Row
	*A3118	2	Hose Assembly, ⅜" x 80", 16 Row
5.	G6400-08	1	Connector W/O-Ring, ¾"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
6.	*A7603	2	Hose Assembly, ¼" x 112", 12 Row
	*A1129	2	Hose Assembly, ¼" x 168", 16 Row
7.	G6801-06-08	4	Elbow W/O-Ring, 90°, 9⁄16"-18 Male JIC To ¾"-16 O-Ring
	GR1037	-	O-Ring
8.	G6502-06	1	Swivel Elbow, 45°, 9⁄16"-18 Male JIC To Female
9.	G6400-06-08	2	Connector W/O-Ring, 9⁄16"-18 Male JIC To ¾"-16 O-Ring
	GR1037	-	O-Ring
10.	*A1139	2	Hose Assembly, ¼" x 40"
11.	*A1467	2	Hose Assembly, ½" x 120", 12 Row
	*A1478	2	Hose Assembly, ½" x 128", 16 Row
12.	*A1011	2	Hose Assembly, ⅜" x 125", 12 Row
	*A1041	2	Hose Assembly, ⅜" x 130", 16 Row
13.	G2700-10	2	Bulkhead Tube Union, ⅞"-14 Male JIC
14.	G2700-08	2	Bulkhead Tube Union, ¾"-16 Male JIC
15.	*A1106	2	Hose Assembly, ¼" x 130", 12 Row
	*A1116	2	Hose Assembly, ¼" x 136", 16 Row

*** Hydraulic hose is not stocked by KINZE® Repair Parts, but can be made available on a special order basis. Call for quote.**

HYDRAULIC HOSES AND FITTINGS ON PLANTER FRAME

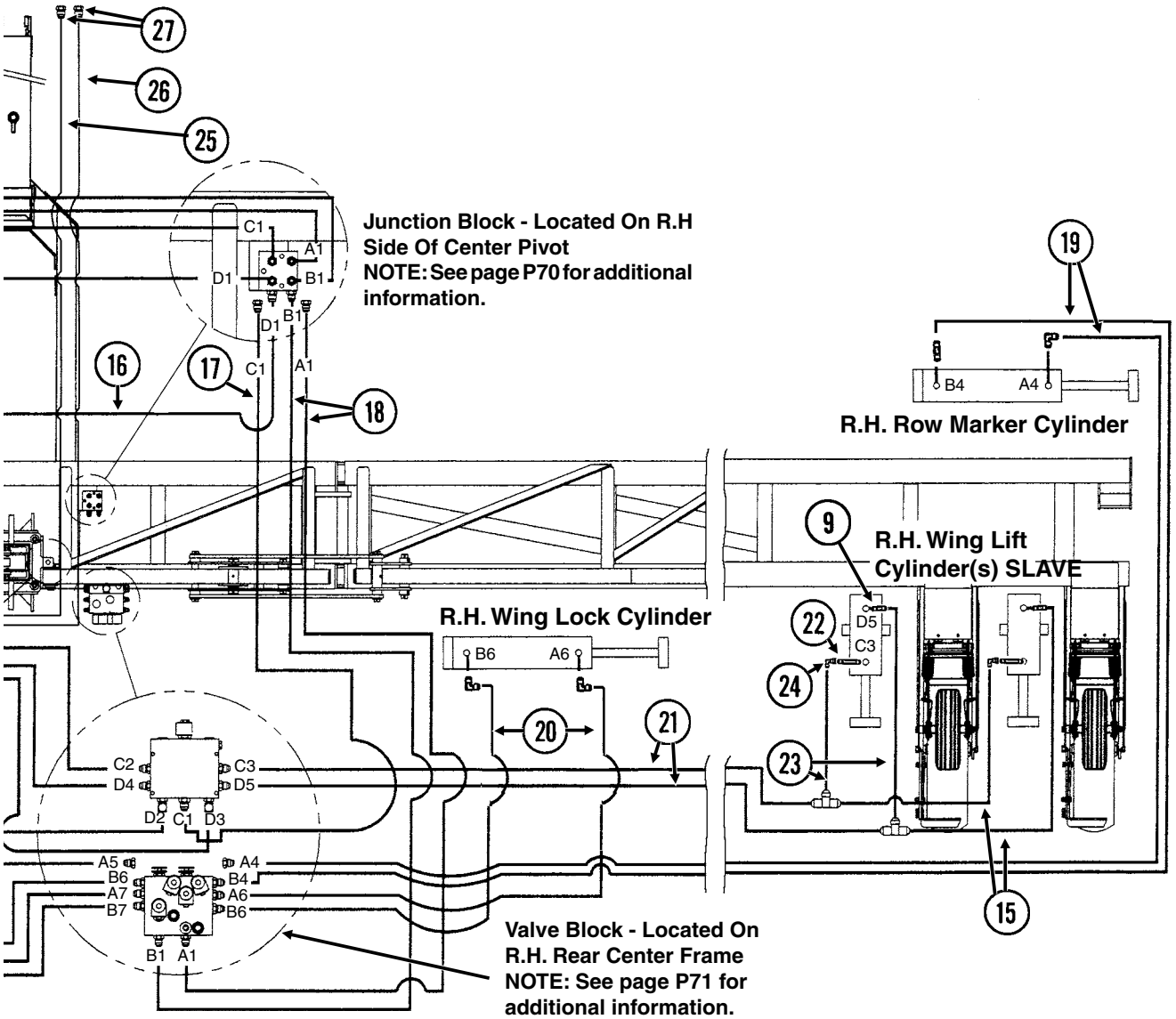
(TWL105b)

16 Row Shown (Two Wing Lift Cylinders Per Wing)
12 Row (One Wing Lift Cylinder Per Wing)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	*A12042	2	Hose Assembly, ⅜" x 228", 12 Row
	*A1097	2	Hose Assembly, ⅜" x 288", 16 Row
2.	G6801-08	6	Elbow W/O-Ring, 90°, ¾"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
3.	G6400-08-04	2	Connector W/O-Ring, ¾"-16 Male JIC To 7/16"-20 O-Ring
	GR1465	-	O-Ring
4.	*A8267	2	Hose Assembly, ½" x 58"
5.	*A3127	2	Hose Assembly, ⅜" x 58"
6.	G2603-08	4	Tee, ¾"-16 Male JIC, 16 Row
7.	*A1033	2	Hose Assembly, ⅜" x 250", 12 Row
	*A1034	2	Hose Assembly, ⅜" x 272", 16 Row
8.	*A1055	2	Hose Assembly, ⅜" x 66"
9.	G6400-08	8	Connector W/O-Ring, ¾"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
10.	*A3128	1	Hose Assembly, ⅜" x 52"
11.	G2703-08-08-10	1	Bulkhead Tee ⅞"-14 Male JIC To ¾"-16 JIC
12.	*A1018	4	Hose Assembly, ⅜" x 40"
13.	*A1076	2	Hose Assembly, ⅜" x 30"

HYDRAULIC HOSES AND FITTINGS ON PLANTER FRAME

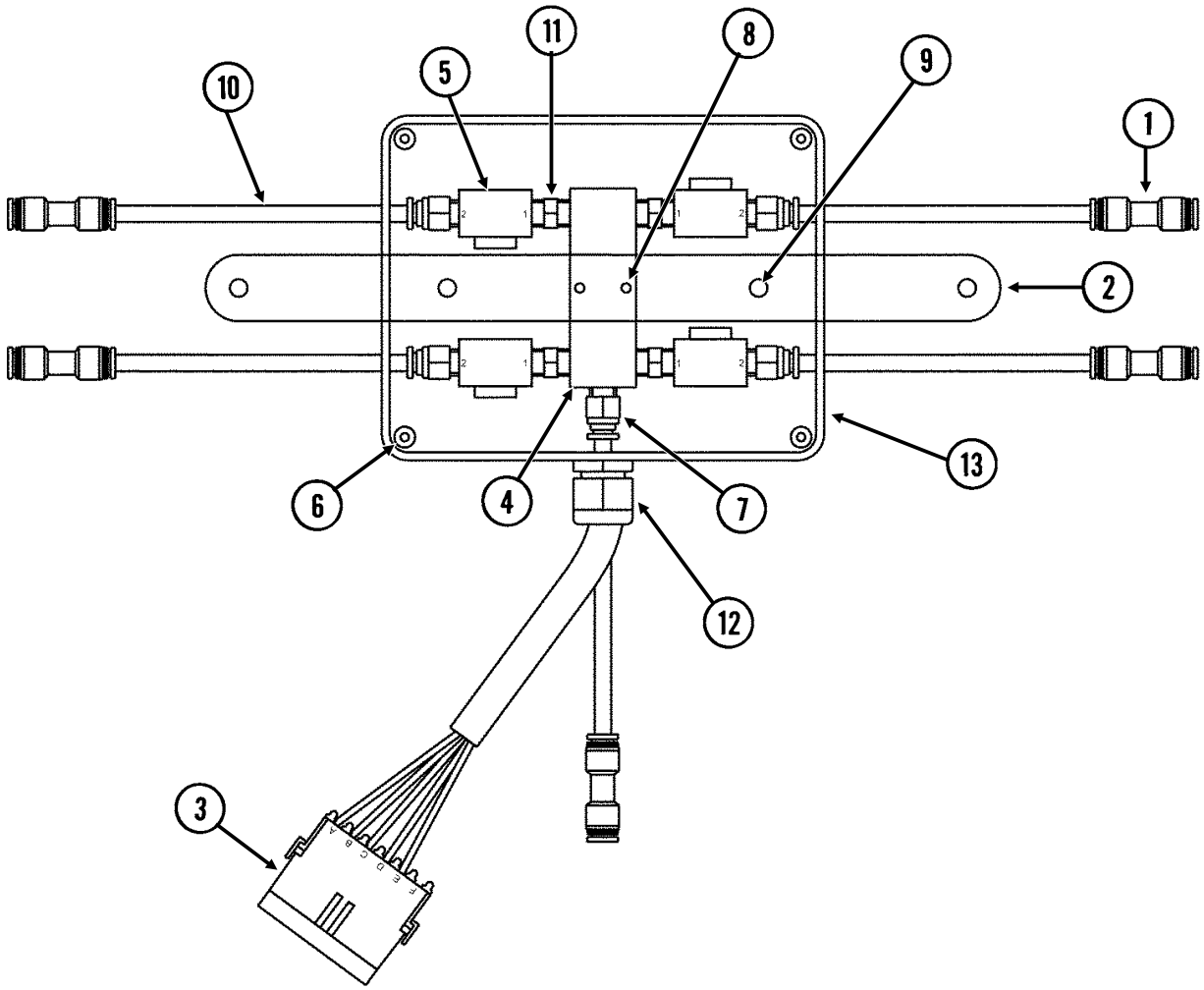


ITEM	PART NO.	QTY.	DESCRIPTION
14.	*A3131	1	Hose Assembly, ⅜" x 42"
15.	*A1028	4	Hose Assembly, ⅜" x 40", 12 Row
16.	*A1404	1	Hose Assembly, ½" x 41"
17.	*A1424	1	Hose Assembly, ½" x 30"
18.	*A1076	2	Hose Assembly, ⅜" x 30"
19.	*A1027	2	Hose Assembly, ⅜" x 182", 12 Row
	*A1097	2	Hose Assembly, ⅜" x 288", 16 Row
20.	*A1076	2	Hose Assembly, ⅜" x 30"
21.	*A1057	2	Hose Assembly, ⅜" x 216", 16 Row
22.	G6400-L-08	-	Long Connector W/O-Ring, ¾"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
23.	*A3122	4	Hose Assembly, ⅜" x 10 ½", 16 Row 30"
24.	G6500-08	-	Swivel Elbow, 90°, ¾"-16 Male JIC To Female
25.	GA12044	1	Hose Assembly, ⅜" x 510"
26.	GA8286	1	Hose Assembly, ½" x 510"
27.	GD4086	2	ISO Coupler

*** Hydraulic hose is not stocked by KINZE® Repair Parts, but can be made available on a special order basis. Call for quote.**

VALVE BOX MODULE

(A12554)

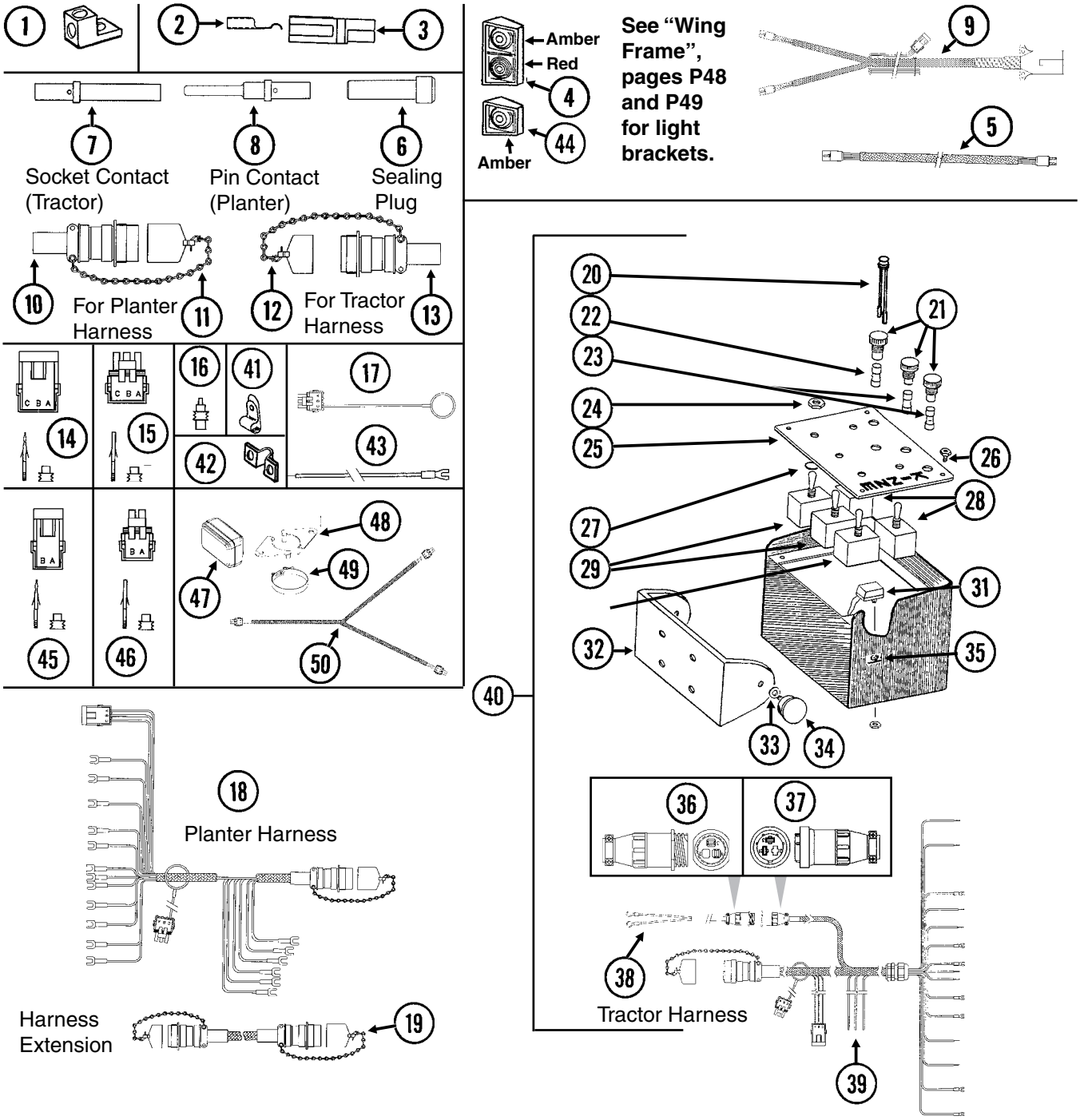


VALVE BOX MODULE

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD18395	5	Straight Union, ¼"
2.	GD18389	1	Strap
3.	GA12861	1	Valve Box Harness
4.	GA12865	1	Manifold
5.	GA12866	4	Valve
6.	G11243	4	Slotted Flat Head Machine Screw, No. 8-32 x ½", Stainless Steel
7.	GD18085	5	Male Connector, ¼"
8.	G11244	2	Phillips Flat Head Machine Screw, No. 10-24 x 1 ½"
	G10395	2	Hex Nut, No. 10-24
9.	G10022	2	Hex Head Cap Screw, ¼"-20 x ½"
	G10110	2	Lock Nut, ¼"-20, Grade B
10.	GD17151-05	5	Nylon Tube, ¼" O.D. x 5" Long
11.	GD18398	5	Hex Nipple, ⅛" Pipe
12.	GA9963	1	Strain Relief
13.	GD18437	1	Valve Box Cover
A.	GA12554	-	Valve Box Module Assembly, (Items 1-13)

ELECTRICAL COMPONENTS

(TWL19a/TWL18/ELC14/ELC3a/ELC5c/MTR27a/ELC39/TWL26e/ELC8/A9481/ELC12b/MTR27t/A9689b/A10924ELC4/FF27b/FF27c/ELC38/A9201a/A9202a/TWL20g/ELC34/ELC35/ELC10c)



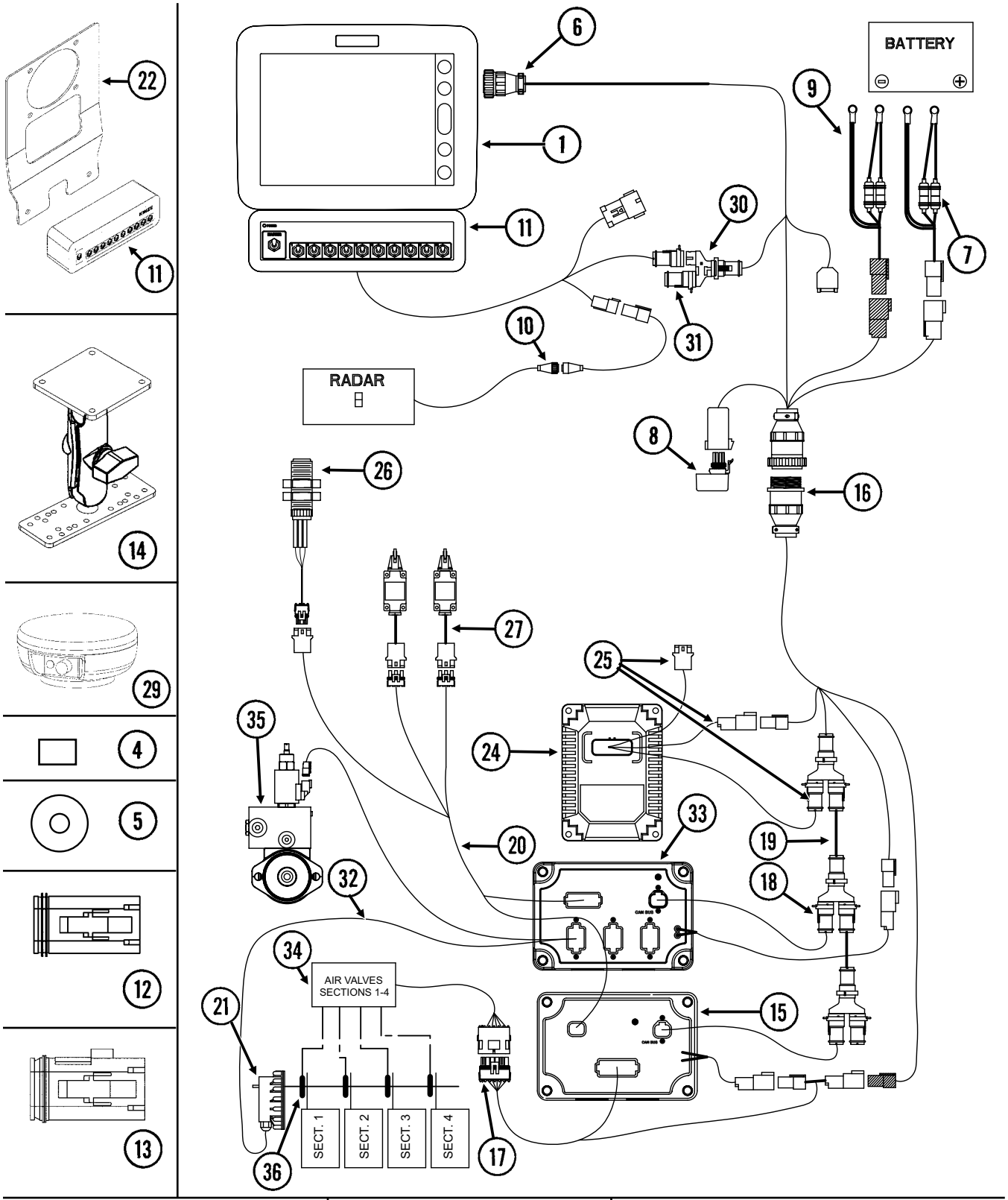
ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA3584	-	Ground Clamp
2.	GD9530	-	Contact
3.	GD9529	-	Housing, Black
	GD12726	-	Housing, Red
4.	GA6699	1	Double Light Assembly (Shown)
	GA6700	1	Double Light Assembly
	GR1203	-	Red Lens
	GR1204	-	Amber Lens
	GR1205	-	Cover
	GR1206	-	Rubber Grommet (4)
	GR1207	-	Lamp Unit
	GR1208	-	Bulb
5.	GA9096	-	Harness Extension, 42"
6.	GD8739	-	Sealing Plug, No. 12

ELECTRICAL COMPONENTS

ITEM	PART NO.	QTY.	DESCRIPTION
7.	GD8740	-	Socket Contact, No. 14
8.	GD8741	-	Pin Contact, No. 14
9.	GA9202	-	Wiring Harness W/7 Terminal Female Connector, 786" (2 Light Connections), 12 Row
	GA9204	-	Wiring Harness W/7 Terminal Female Connector, 882" (2 Light Connections), 16 Row
	GA5385	-	7 Terminal Female Connector
10.	GA6109	1	Connector W/Cable Clamp, 23 Pin Capacity
11.	GA7862	-	Dust Cap W/Chain
12.	GA7863	-	Dust Cap W/Chain
13.	GA6108	1	Connector W/Cable Clamp, 23 Socket Capacity
14.	G1K248	-	3-Pin Female Connector Kit (Black), Includes: (3) 3-Pin Female Housings, (9) Pin Contacts, (9) Seals
15.	G1K252	-	3-Pin Male Connector Kit (Black), Includes: (3) 3-Pin Male Housings, (9) Socket Contacts, (9) Seals
16.	GD11089	-	Sealing Plug
17.	GA8047	-	Dust Plug (Black)
18.	GA9112	1	Wiring Harness W/Dust Cap, 516", 12 Row
	GA9113	-	Wiring Harness W/Dust Cap, 636", 16 Row
19.	GA7399	-	Harness Extension W/Dust Caps, 180"
20.	GA7077	1-4	Indicator Light
21.	GA2612	3-5	Fuse Holder W/Spade, 1 33/50"
22.	GD2829	1-2	Fuse, 15 Amp, Type AGC
23.	GD10243	2-6	Fuse, MDL 10 Amp Delay Action
24.	GR1363	5	Hex Face Nut, 15/32"-32
	GR1364	5	Internal Tooth Lock Washer, 15/32"
25.	GA8734	1	Cover Plate (Shown)
26.	GR1292	4	Pan Head Screw, No. 8-32 x ½"
27.	GD3860	-	O-Ring (If Applicable)
28.	GA2528	2	Switch, 3 Position Toggle, On-Off-On
29.	GA6978	2	Switch, 3 Position Toggle, Momentary On-Off-Momentary On
30.	GA6977	1-2	Switch, 2 Position Toggle, On-Off
31.	GA8731	1	Switch, Push Button W/Transformer
32.	GD9896	1	Mounting Bracket
33.	G10211	4	Washer, ¼" SAE
34.	GA6975	2	Knob
35.	GR1290	2	Cage Nut, ¼"-20
36.	G1K267	-	Console Cable Connector Kit, Includes: (1) 3-Pin Connector, (1) Cable Clamp, (3) Male Terminal Pins
37.	G1K268	-	Console Cable Connector Kit, Includes: (1) 3-Pin Connector, (1) Cable Clamp, (1) Lock Ring, (3) Female Terminal Pins
38.	GA7856	1	Power Lead Adapter
39.	GA8729	1	Wiring Harness W/Dust Cap And Power Cable
40.	G7633X	-	Backlit Control Console Assembly W/Mounting Brackets, Short Harness W/Dust Cap And Power Cable
41.	GD6291	-	Insulated Clamp, ⅜"
	GD13348	-	Insulated Clamp, 11/16"
42.	GD13310	-	Jumper, 7/16"
43.	GA9481	-	Jumper Wire W/Fork Terminal, 13"
	G10996	-	Fork Terminal
44.	GA6701	1	Single Amber Light Assembly
	GR1204	-	Amber Lens
	GR1206	-	Rubber Grommet (2)
	GR1207	-	Lamp Unit
	GR1208	-	Bulb
45.	G1K321	-	2-Pin Female Connector Kit (Black), Includes: (3) 2-Pin Female Housings, (6) Pin Contacts, (6) Seals
46.	G1K320	-	2-Pin Male Connector Kit (Black), Includes: (3) 2-Pin Male Housings, (6) Socket Contacts, (6) Seals
47.	GA9689	2	Work Light Assembly
48.	GD16046	2	Bracket
49.	G11159	1-2	T-Bolt Clamp, 3 ½" Stainless Steel
50.	GA10924	1	Wiring Harness, 348"

KINZE VISION® DISPLAY

(VI50/VI18/VI21/A12553/GR1838/GR1839/A12852/A12853)



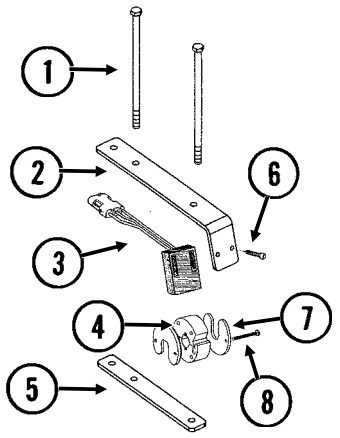
KINZE VISION® DISPLAY

ITEM	PART NO.	QTY.	DESCRIPTION
1.	*GA12536	1	Vision Display
2.	GA12852	1	Power Supply
3.	GA12853	1	Null Modem Cable
4.	GR1835	1	Flash Card
5.	GR1836	1	SMS CD
6.	GA12551	1	Display Cable
7.	GA12562	1	Power Cable
8.	GA12540	1	Power Control Relay
9.	GA12598	1	Seed Rate Power Cable
10.	GA12596	1	Radar Adapter Cable
11.	*GA12539	1	Switch Box Module
12.	GR1838	1	Dust Plug
13.	GR1839	1	Dust Plug
14.	GA12868	1	Mounting Bracket Assembly
	GD18407	1	Ram Base
	GD18408	1	Ram Vesa Base
15.	GA12537	1	Clutch Control Module
16.	GA12555	1	Implement Cable (12 Row)
	GA12655	-	Implement Cable (16 Row)
17.	GA12556	1	Seed Command Cable
18.	GA12558	1	Can Stub Cable, 8"
19.	GA12559	1	Can Extension, 5"
20.	GA12560	1	Implement Switch Extension Cable
21.	GA12565	1	Encoder Module
22.	GR1837	1	Switch Box Bracket
24.		-	See “Planter Monitor Module (PMM)”, Pages P88 And P89
25.		-	See “Planter Monitor Module (PMM)”, Pages P88 And P89
26.	GA13204	1	Hall Effect Sensor
27.	GA12561	2	Implement Switch Cable
28.	GA12553	1	GPS Cable
29.	GA12552	1	GPS Antenna
30.	GD18176	-	Y-Splice Connector
31.	GD18177	-	Terminator
32.	GA12568	1	Seed Rate Cable
33.	GA12564	1	Seed Rate Module
34.		-	See “Center Frame”, Pages P44 And P45
35.		-	See “Valve Block - Located On L.H. Rear Center Frame”, Pages P74 And P75
36.		-	See “Parallel Arms, Mounting Support Plate And Quick Adjustable Down Force Springs Option”, Pages P10 And P11 And “Interplant Push Row Unit”, Pages P34 And P35

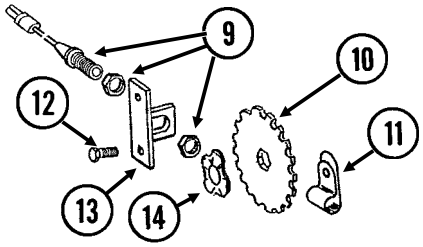
PLANTER MONITOR MODULE (PMM)

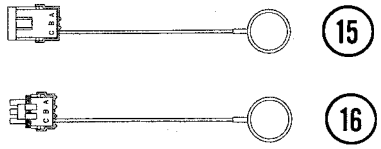
(MTR60/MTR63/PMM01/MTR65/MTR61/MTR64/MTR62/PMM02)

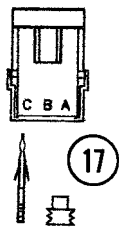
Shaft Rotation Sensor

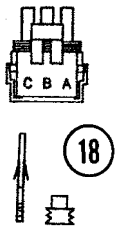


Magnetic Distance Sensor (MDS)

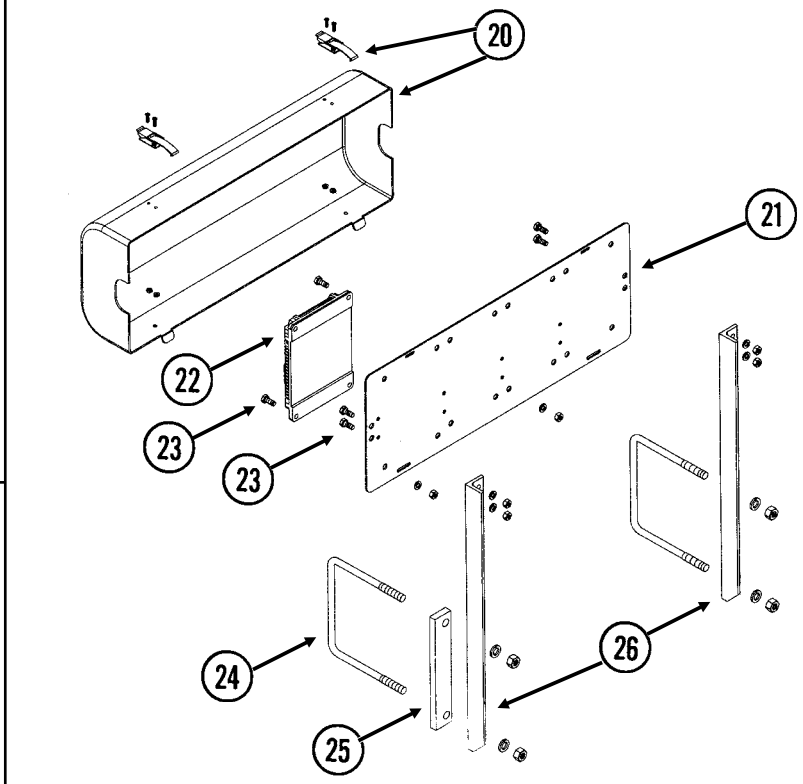




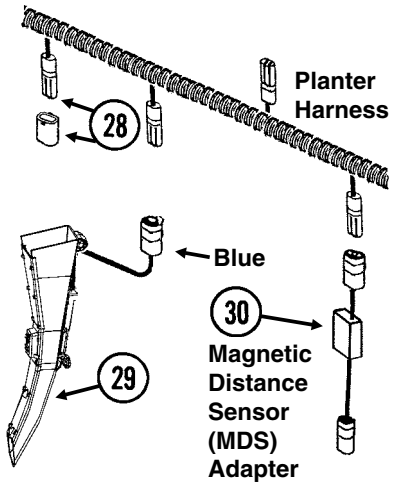


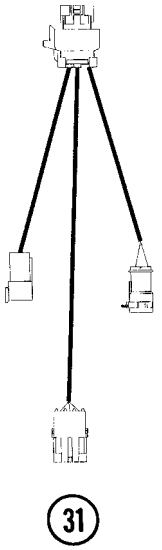












NOTE: See KINZE Vision® Planter Control System Display Operator Manual (M0214) and associated cab harness components.

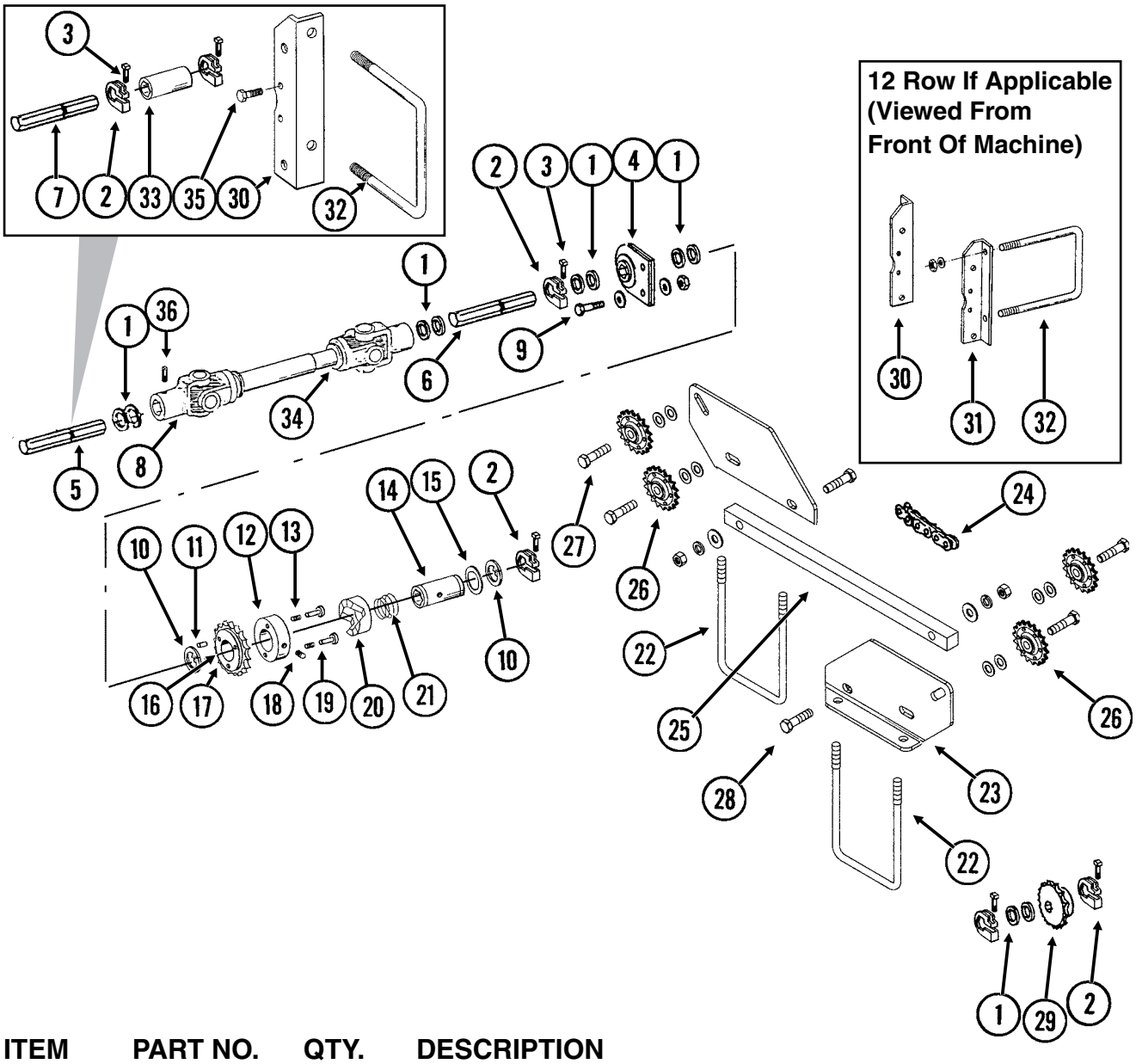
ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10686	4	Hex Head Cap Screw, ⅜"-16 x 8"
	G10229	4	Lock Washer, ⅜"
	G10101	4	Hex Nut, ⅜"-16
2.	GD18118	2	Shaft Sensor Mount
3.	GR1415	2	Rotation Sensor

PLANTER MONITOR MODULE (PMM)

ITEM	PART NO.	QTY.	DESCRIPTION
4.	GR1414	2	Actuator
5.	GD18168	2	Mount
6.	G11288	4	Pan Head Screw, No. 10-32 x 1 ¼"
	G10243	4	Washer, No. 10 SAE
	G10758	4	Hex Nut, No. 10-32
7.	GD11474	2	Cover
8.	G10927	2	Pan Head Machine Screw, No. 8-32 x 1 ¼", Stainless Steel
	G10931	2	Lock Washer, No. 8, Internal/External, Stainless Steel
	G10928	2	Hex Nut, No. 8-32, Stainless Steel
9.	GA5600	1	Magnetic Distance Sensor
10.	GD8751	-	Magnetic Distance Sensor Pulse Wheel
11.	GD6291	-	Insulated Clamp, ⅜"
12.	G10001	2	Hex Head Cap Screw, ⅜"-16 x 1"
	G10229	2	Lock Washer, ⅜"
	G10101	2	Hex Nut, ⅜"-16
13.	GD8770	1	Bracket
14.	GD8771	1	Spring Wave Washer
15.	GA8046	-	Dust Plug (Black)
	GA9978	-	Dust Plug (Blue)
16.	GA8047	-	Dust Plug (Black)
	GA9979	-	Dust Plug (Blue)
17.	G1K248	-	3-Pin Female Connector Kit (Black), Includes: (3) 3-Pin Female Housings, (9) Pin Contacts, (9) Seals
	G1K362	-	3-Pin Female Connector Kit (Blue), Includes: (3) 3-Pin Female Housings, (9) Pin Contacts, (9) Seals
18.	G1K252	-	3-Pin Male Connector Kit (Black), Includes: (3) 3-Pin Male Housings, (9) Socket Contacts, (9) Seals
	G1K363	-	3-Pin Male Connector Kit (Blue), Includes: (3) 3-Pin Male Housings, (9) Socket Contacts, (9) Seals
19.	GD11089	-	Sealing Plug
20.	GA12563	1	Module Cover Assembly W/Lock Clamps
	GA12641	-	Lock Clamp
	G11065	-	Phillips Pan Head Machine Screw, No. 8-32 x ⅝", Stainless Steel
	G11241	-	Serrated Flange Nut
21.	GD18013	1	Bracket
22.	GA12538	1	Planter Monitor Module
23.	G10043	6	Hex Head Cap Screw, 5/16"-18 x ¾"
	G10232	6	Lock Washer, 5/16"
	G10106	6	Hex Nut, 5/16"-18
24.	GD11721	2	U-Bolt, 5" x 7" x ½"-13
	G10228	4	Lock Washer, ½"
	G10102	4	Hex Nut, ½"-13
25.	GD16316	1	Spacer, 1½" x 9"
26.	GD16315	2	Support, 21 ½"
27.	GR0594	-	Brush
28.	GA7851	-	Planter Harness W/Dust Caps, 12 Row (16 Connectors)
	GA7852	-	Planter Harness W/Dust Caps, 16 Row (20 Connectors)
	GD11993	-	Dust Cap
29.	GA10901	-	Seed Tube W/Computerized Sensor
	GR1629	-	Sensor Only
	GA10940	-	Seed Tube (With Holes For Sensor Installation)
30.	GA7859	1	Magnetic Distance Sensor Adapter (Analog To Digital)
31.	GA12557	1	Planter Monitor Cable
A.	GA6147	-	Magnetic Distance Sensor And Mounting Package (Items 9-14)

INTERPLANT® PUSH ROW UNIT DRIVE

(RU134/TWL516)



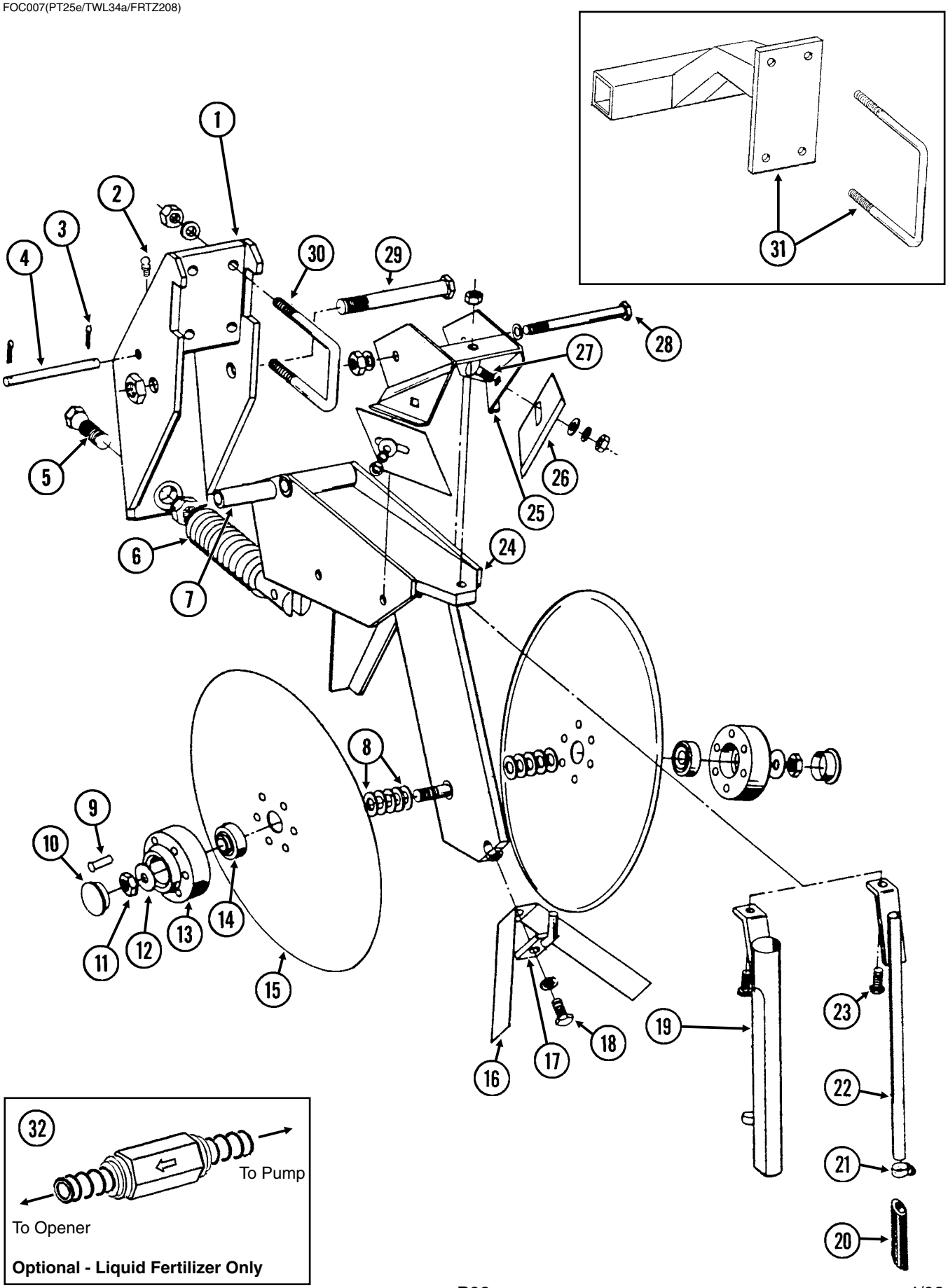
ITEM	PART NO.	QTY. (Per Side)	DESCRIPTION
1.	G10233	-	Machine Bushing, 1", 10 Gauge (As Required)
2.	GD11045	-	Lock Clamp
3.	G10130	-	Square Head Machine Bolt, 5/16"-18 x 1 3/4"
	G10923	-	Flange Nut, 5/16"-18, No Serration
4.	GA2180	-	Hanger Bearing, 7/8" Hex Bore
5.	GD0914-48	-	Hex Shaft, 7/8" x 48" (No Holes), R.H. Side
	GD0914-66	-	Hex Shaft, 7/8" x 66" (No Holes), L.H. Side
6.	GD0914-90	-	Hex Shaft, 7/8" x 90" (No Holes), Both Sides, 12 Row
	GD0914-124	-	Hex Shaft, 7/8" x 124" (No Holes), R.H. Side, 16 Row
	GD0914-138	-	Hex Shaft, 7/8" x 138" (No Holes), L.H. Side, 16 Row
7.	GD0914-24	-	Hex Shaft, 7/8" x 24" (No Holes), 12 Row W/Even-Row Push Row Unit
	GD0914-33	-	Hex Shaft, 7/8" x 33" (No Holes), 16 Row W/Even-Row Push Row Unit
8.	GA7052	-	U-Joint W/Grease Fitting, Female, 10 1/4" Long
	GR1557	-	Grease Fitting, 45°, Metric
	GR1297	-	Inboard Yoke And Outer Profile (10 1/4" U-Joint)
	GR1298	-	Inboard Yoke And Outer Profile (18 1/8" U-Joint)
	GR1294	-	Cross And Bearing Kit
	GR1293	-	Yoke, 7/8" Hex

INTERPLANT® PUSH ROW UNIT DRIVE

ITEM	PART NO.	QTY. (Per Side)	DESCRIPTION
9.	G10004	-	Hex Head Cap Screw, ⅜"-16 x 1 ¼"
	G10210	-	Washer, ⅜" USS
	G10229	-	Lock Washer, ⅜"
	G10101	-	Hex Nut, ⅜"-16
10.	G10496	2	External Inverted Snap Ring, 1 ½"
11.	G10968	1	Spring Pin, 5⁄32" x 7⁄16"
12.	GR1405	1	Lock Collar
13.	GR1413	1	Spring
14.	GR1407	1	Drive Shaft
15.	GR1411	1	Shim
16.	GR1406	1	Bushing
17.	GR1412	1	Sprocket, 19 Tooth
18.	G10535	1	Hex Socket Set Screw, ⅜"-16 x ¾"
19.	GR1410	1	Pin
20.	GR1409	1	Knurled Collar
21.	GR1408	1	Compression Spring
22.	GD8306	2	U-Bolt, 7" x 5" x ½"-13
	G10228	4	Lock Washer, ½"
	G10102	4	Hex Nut, ½"-13
23.	GD18094	2	Plate (Shown)
	GD18066	-	Plate
24.	G3310-226	1	Chain, No. 40, 226 Pitch Including Connector Link
	GR0912	-	Connector Link, No. 40
25.	GD18067	1	Brace
26.	GA7154	4	Sprocket W/Bearing, 18 Tooth
27.	G10016	4	Hex Head Cap Screw, ½"-13 x 2"
	G10206	8	Washer, ½" SAE
	G10228	4	Lock Washer, ½"
	G10102	4	Hex Nut, ½"-13
28.	G10016	2	Hex Head Cap Screw, ½"-13 x 2"
	G10216	2	Washer, ½" USS
	G10228	2	Lock Washer, ½"
	G10102	2	Hex Nut, ½"-13
29.	GA5107	2	Sprocket, 19 Tooth
30.	GD11972	-	Support Angle, R.H.
31.	GD11973	-	Support Angle, L.H.
32.	GD1113	-	U-Bolt, 5" x 7" x ⅝"-11
	G10230	-	Lock Washer, ⅝"
	G10104	-	Hex Nut, ⅝"-11
33.	GD1719	-	Coupler, 4"
34.	GA7051	1	U-Joint W/Grease Fitting, Male, 12 ¼" Long
	GR1557	-	Grease Fitting, 45°, Metric
	GR1296	-	Inner Profile
	GR1295	-	Inboard Yoke
	GR1301	-	Spring Pin, 8mm x 50mm
	GR1294	-	Cross And Bearing Kit
	GR1293	-	Yoke, ⅞" Hex
35.	G10752	-	Hex Head Cap Screw, ⅝"-18 x 2 ¼"
	GD7805	-	Special Washer, ⅝", Hardened
	G10412	-	Lock Nut, ⅝"-18
36.	G10688	-	Square Head Set Screw, ⅜"-16 x ⅝"
A.	GA8092	-	Clutch Sprocket Assembly, 19 Tooth (Items 10-21)
B.	G1K269	-	Lock Clamp Kit (Items 2 And 3)
C.	G1K331	-	Clutch Sprocket Kit (Items 11, 16 And 17)

DOUBLE DISC FERTILIZER OPENER AND MOUNT

FOC007(PT25e/TWL34a/FRTZ208)

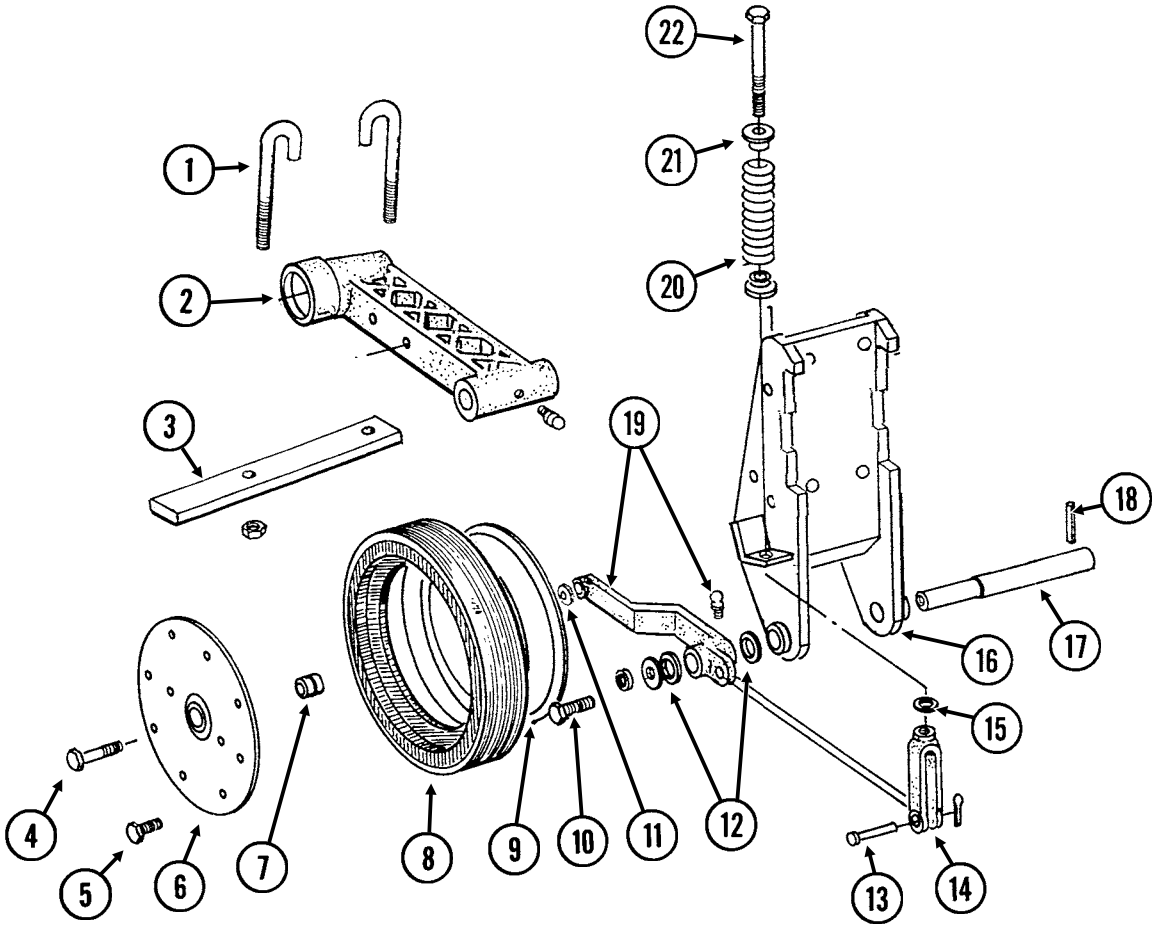


DOUBLE DISC FERTILIZER OPENER AND MOUNT

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GA8483	1	Bracket
2.	G10938	1	Grease Fitting, ¼"-28, Taper Threads
3.	G10451	2	Cotter Pin, ⅛" x 1"
4.	GD1657	1	Lockup Pin
5.	GD0962	1	Hex Head Adjusting Bolt, ⅝"-18 x 3 ¼"
	G10499	1	Hex Jam Nut, ⅝"-18, Grade 2
6.	GA0328	1	Spring
7.	GD0487	1	Bushing, 41⁄64" I.D. x 3 ½" Long
8.	G10213	-	Machine Bushing, ⅝" (.030" Thick)
9.	G10542	12	Rivet, ¼" x 1 5⁄16"
10.	GD1132	2	Dust Cap
11.	G10503	1	Hex Jam Nut, ⅝"-11, Grade 2
	G10504	1	Hex Jam Nut, ⅝"-11, L.H. Threads, Grade 2
12.	G10204	2	Special Machine Bushing, ⅝" x 1" O.D.
13.	GB0134	2	Hub
14.	GA2014	2	Bearing
15.	GD11306	2	Disc Blade, 3.5 mm x 15"
16.	GD2589	1	Inner Scraper
17.	GA0312	1	Mount
18.	G10019	1	Hex Head Cap Screw, 5⁄16"-18 x 1"
	G10232	1	Lock Washer, 5⁄16"
19.	GA1369	-	Drop Tube, Dry Fertilizer
20.	GD11705	-	Extension
21.	G10681	-	Hose Clamp, No. 6
22.	GA8685	-	Drop Tube, Liquid Fertilizer
23.	G10133	1	Hex Head Cap Screw, 5⁄16"-18 x 1 ½"
	G10221	1	Washer, 5⁄16" SAE
	G10109	1	Lock Nut, 5⁄16"-18, Grade 8
24.	GA9195	1	Shank
25.	GA0810	1	Scraper Mount
26.	GD1673	2	Scraper
27.	G10305	2	Carriage Bolt, ⅜"-16 x 1"
	G10210	2	Washer, ⅜" USS
	G10229	2	Lock Washer, ⅜"
	G10101	2	Hex Nut, ⅜"-16
28.	G10045	1	Hex Head Cap Screw, ½"-13 x 4 ½"
	G10111	1	Lock Nut, ½"-13
29.	G10046	1	Hex Head Cap Screw, ⅝"-11 x 5"
	G10107	1	Lock Nut, ⅝"-11
30.	GD1138	2	U-Bolt, 2 ½" x 2 ½" x ½"-13
	G10228	4	Lock Washer, ½"
	G10102	4	Hex Nut, ½"-13
31.	GA7135	1	Mount (One Per Opener) W/U-Bolts
	GD1113	2	U-Bolt, 5" x 7" x ⅝"-11
	G10230	4	Lock Washer, ⅝"
	G10104	4	Hex Nut, ⅝"-11
32.	GA8983	-	Check Valve, Low Rate
A.	GA8845	-	Disc Blade And Bearing Assembly (Items 9 And 13-15)

HD SINGLE DISC FERTILIZER OPENER (Soil Press Wheel)

(TWL35d/TWL35b)

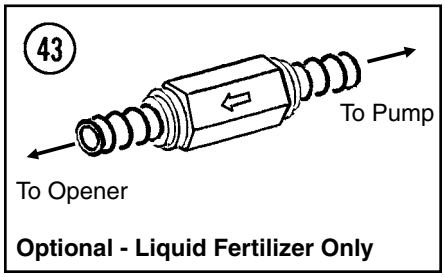


HD SINGLE DISC FERTILIZER OPENER (Soil Press Wheel)

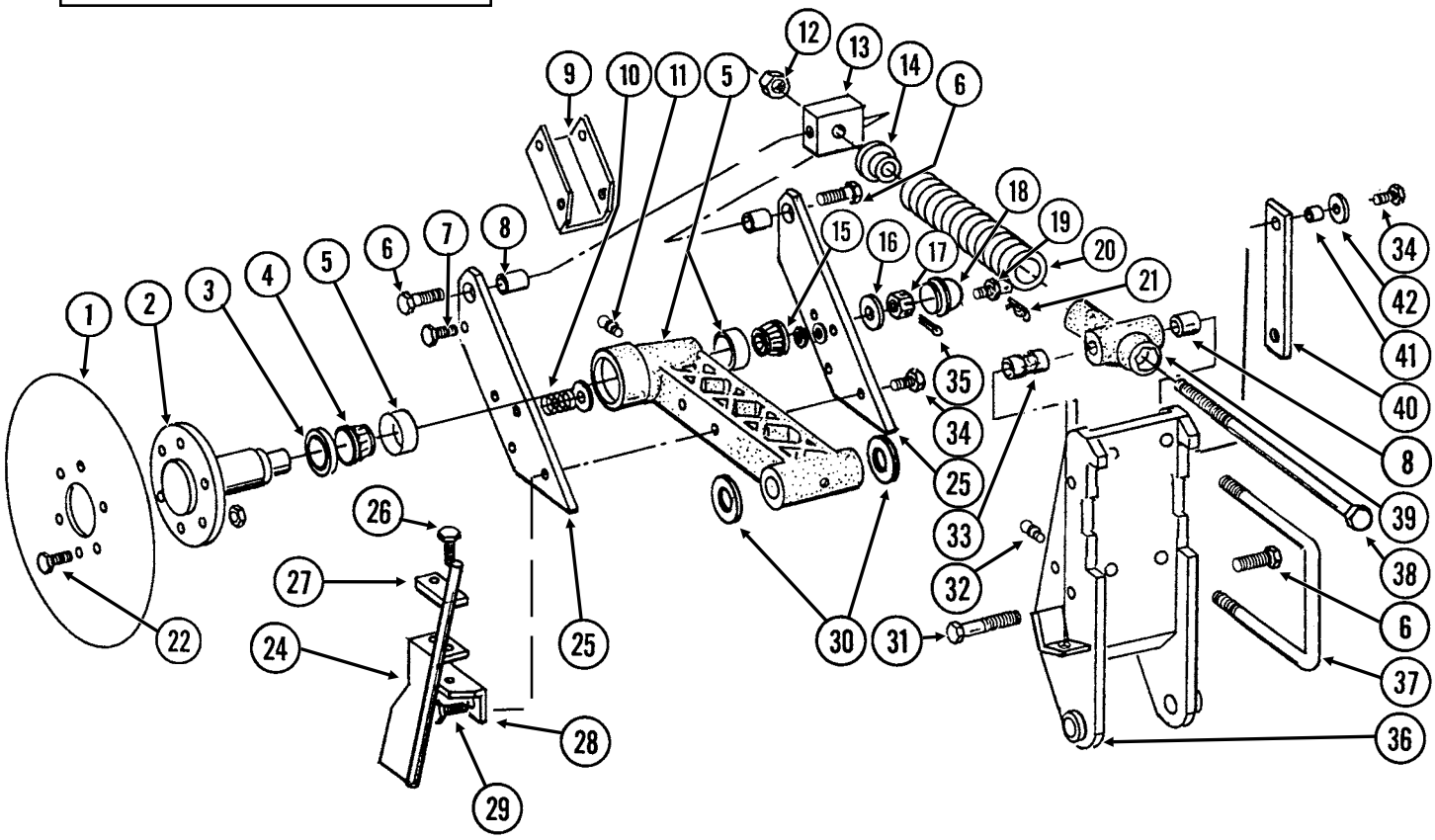
ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GD9705	2	J-Bolt, ½"-13
	G10228	2	Lock Washer, ½"
	G10102	2	Hex Nut, ½"-13
2.		-	See “HD Single Disc Fertilizer Opener (Drop Tube)”, Pages P96 And P97
3.	GD9706	1	Lockup Bar
4.	G10010	1	Hex Head Cap Screw, ⅝"-11 x 3"
5.	G10961	11	Flanged Whiz Lock Screw, 5⁄16"-18 x ⅝", No Serration
	G10620	11	Serrated Flange Nut, 5⁄16"-18
6.	GD11954	1	Half Wheel Cover, Nylon
7.	GA6171	1	Bearing
8.	GD11953	1	Offset Tire
9.	GD11423	1	Half Wheel
10.	G10438	1	Hex Head Cap Screw, ½"-13 x ¾"
	G10228	1	Lock Washer, ½"
	G10216	1	Washer, ½" USS
11.	G10230	1	Lock Washer, ⅝"
12.	G10526	10	Machine Bushing, 1" (.048" Thick)
13.	G10560	1	Clevis Pin, ½" x 1 ¾"
	G10456	1	Cotter Pin, ⅛" x ¾"
14.	GD8218	1	Yoke
15.	G10205	1	Washer, ⅝" SAE
16.		-	See “HD Single Disc Fertilizer Opener (Drop Tube)”, Pages P96 And P97
17.	GD7911	1	Pivot Pin
18.	G10610	1	Spring Pin, ⅜" x 2"
19.	GA8306	-	Wheel Arm W/Grease Fitting, R.H.
	GA8305	1	Wheel Arm W/Grease Fitting, L.H. (Shown)
	G10640	1	Grease Fitting, ¼"-28
20.	GD8308	1	Spring
21.	GB0212	2	Spring Washer
22.	GD9709	1	Special Bolt
A.	G1K215	-	Lockup Kit (Items 1 And 3)
B.	GA8877	-	Gauge Wheel Complete (Items 5-9)

HD SINGLE DISC FERTILIZER OPENER (Drop Tube)

(PT27e/FRTZ208)



Optional - Liquid Fertilizer Only



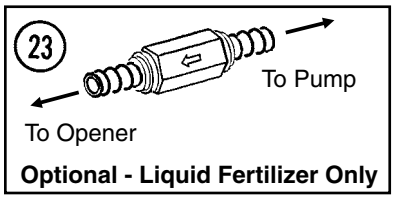
ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GD7900	1	Disc Blade, 18"
	GD8247	-	Disc Blade, 20" (Optional)
2.	GB0205	1	Spindle
3.	GA4286	1	Seal
4.	GA4287	1	Bearing
5.	GA5887	1	Arm W/Cups And Washers
	GD6553	-	Inner Cup
	GR0188	-	Outer Cup
	G10205	3	Washer, ⅝" SAE

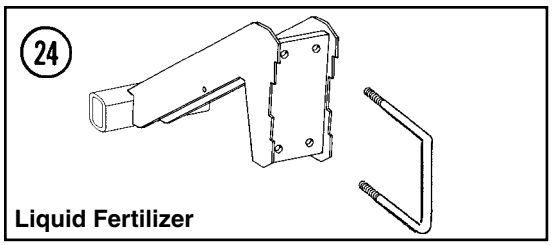
HD SINGLE DISC FERTILIZER OPENER (Drop Tube)

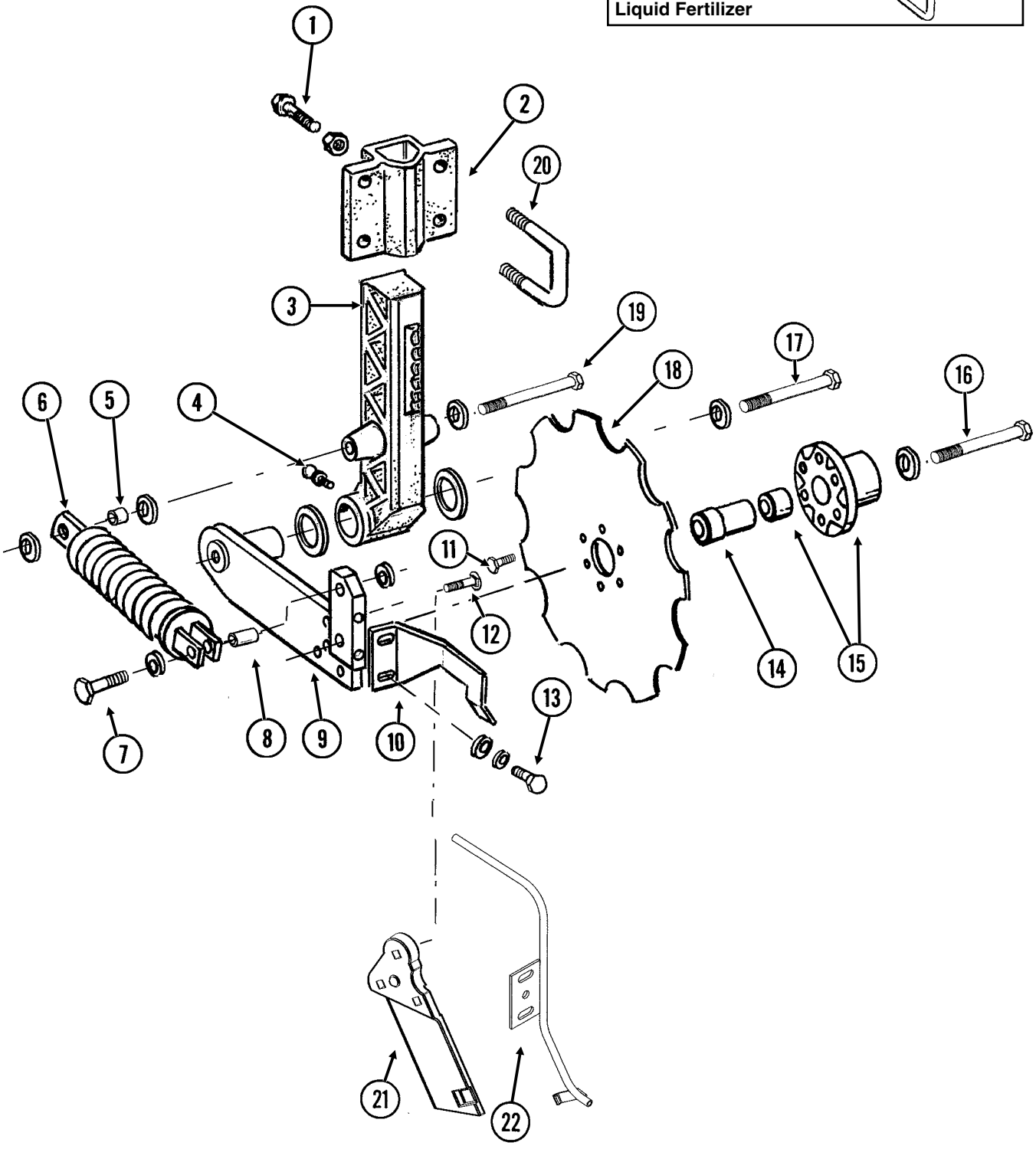
ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
6.	G10007	3	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
7.	G10001	2	Hex Head Cap Screw, 3/8"-16 x 1"
	G10108	2	Lock Nut, 3/8"-16
8.	GB0218	3	Bushing, 21/32" I.D. x 7/8" O.D. x 19/32" Long
9.	GD8238	1	Channel
10.	GD7962	2	Spring
11.	G10641	2	Grease Fitting, 1/8" NPT
12.	G10105	3	Hex Nut, 3/4"-10
13.	GD7908	1	Tap Block
14.	GB0213	1	Spring Seat
15.	GA0237	1	Bearing
16.	G10220	1	Machine Bushing, 1 1/16", 10 Gauge
17.	G10507	1	Slotted Nut, 1"-14
18.	GD1104	1	Dust Cap
19.	GD8276	1	Pin
	G10237	1	Lock Washer, 7/16"
	G10100	1	Hex Nut, 7/16"-14
20.	GD10273	1	Compression Spring
21.	G10592	1	Hair Pin Clip, No. 11
22.	G10594	6	Bolt, 1/2"-13 x 1 1/2"
	G10111	6	Lock Nut, 1/2"-13
23.	G10049	2	Hex Head Cap Screw, 3/8"-16 x 2 1/2"
	G10210	2	Washer, 3/8" USS
	G10108	2	Lock Nut, 3/8"-16
24.	GA8689	1	Drop Tube, L.H., Liquid Fertilizer (Shown)
	GA8688	-	Drop Tube, R.H., Liquid Fertilizer
25.	GD8224	2	Bar
26.	G10004	2	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
	G10229	2	Lock Washer, 3/8"
27.	GD10487	1	Clamp
28.	GD10304	-	Angle, R.H.
	GD10303	1	Angle, L.H. (Shown)
29.	G10016	2	Hex Head Cap Screw, 1/2"-13 x 2"
	G10111	2	Lock Nut, 1/2"-13
30.	G10322	-	Machine Bushing, 1 1/4", 18 Gauge (As Required)
31.	G10862	1	Hex Head Cap Screw, 5/8"-11 x 3 1/4"
	G10205	2	Washer, 5/8" SAE
	G10230	1	Lock Washer, 5/8"
32.	G10640	1	Grease Fitting, 1/4"-28
33.	GD10242	1	Bushing, 2 1/4"
34.	G10039	5	Hex Head Cap Screw, 1/2"-13 x 1 3/4"
	G10111	5	Lock Nut, 1/2"-13
35.	G10459	1	Cotter Pin, 3/16" x 1 1/2"
36.	GA7240	-	Opener Mount, R.H.
	GA7239	1	Opener Mount, L.H. (Shown)
37.	GD1113	2	U-Bolt, 5" x 7" x 5/8"-11
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
38.	GD7907	1	Special Bolt
39.	GB0206	1	Rod Guide
40.	GD8239	1	Storage Strap
41.	GD7904-02	1	Sleeve, 1/2" x 1/2" Long
42.	G10216	3	Washer, 1/2" USS
43.	GA8983	-	Check Valve, Low Rate

NOTCHED SINGLE DISC FERTILIZER OPENER

(FRTZ208/B0405/TWL34e/TWL34g/FRTZ268/A12108)





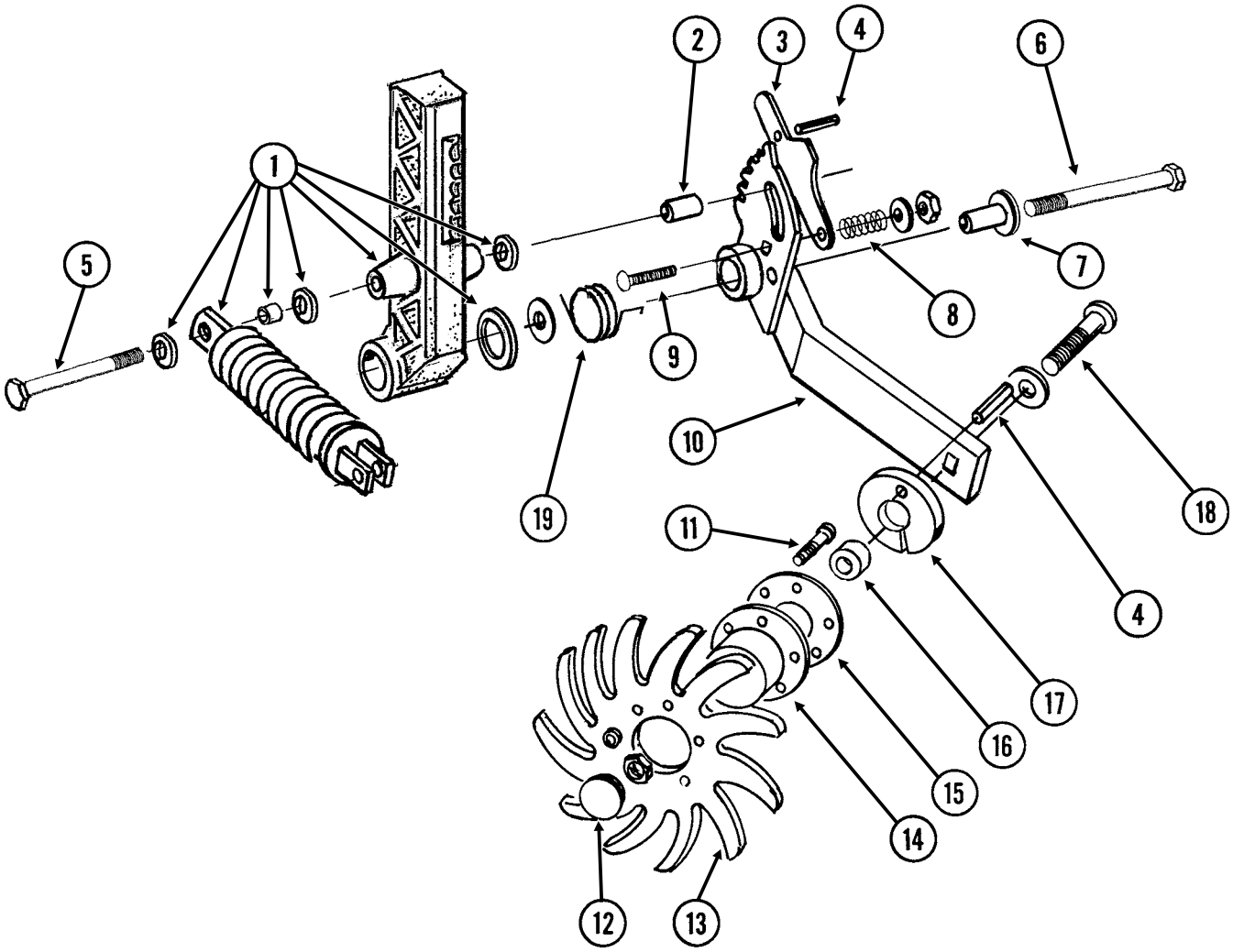


NOTCHED SINGLE DISC FERTILIZER OPENER

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	G10017	3	Hex Head Cap Screw, ½"-13 x 1 ½"
	G10102	3	Hex Nut, ½"-13
2.	GB0405	1	Mount, L.H. (Shown)
	GB0400	-	Mount, R.H.
3.	GB0296	1	Arm, 13 ½"
4.	G10640	1	Grease Fitting, ¼"-28
5.	GD12685	1	Bushing, ¾" O.D. x ½" Long
6.	GA6966	1	Compression Spring Assembly
7.	G10047	1	Hex Head Cap Screw, ⅜"-16 x 1 ¾"
	G10210	2	Washer, ⅜" USS
	G10108	1	Lock Nut, ⅜"-16
8.	GD1026	1	Sleeve, 1 3⁄16" Long
9.	GA9433	1	Pivot Arm, L.H. (Shown)
	GA9434	-	Pivot Arm, R.H.
10.	GD11557	1	Scraper, L.H. (Shown)
	GD11558	-	Scraper, R.H.
11.	G10002	6	Hex Head Cap Screw, ⅜"-16 x ¾"
12.	G10306	3	Carriage Bolt, ⅜"-16 x 2"
	G10108	3	Lock Nut, ⅜"-16
13.	G10991	2	Hex Head Cap Screw, 5⁄16"-18 x ⅞"
	G10232	2	Lock Washer, 5⁄16"
	G10219	2	Washer, 5⁄16" USS
14.	GD12679	1	Stepped Spacer, 3" Long
15.	GA9437	1	Hub W/Bearing
	GA8603	-	Double Row Bearing
16.	G10011	1	Hex Head Cap Screw, ⅝"-11 x 5 ½"
	GD12677	1	Washer, 1 ½" O.D., 7 Gauge, Hardened
	G10107	1	Lock Nut, ⅝"-11
17.	G10046	1	Hex Head Cap Screw, ⅝"-11 x 5"
	G10217	1	Washer, ⅝" USS
	G10450	2	Machine Bushing, 1 ½", 18 Gauge (As Required)
	G10107	1	Lock Nut, ⅝"-11
18.	GD12676	1	Disc Blade, Notched, 16 ¾"
19.	G10871	1	Hex Head Cap Screw, ½"-13 x 6"
	G10206	3	Washer, ½" SAE
	G10111	1	Lock Nut, ½"-13
20.	GD13287	2	U-Bolt, 1 ½" x 2 ½" x ½"-13
	G10228	4	Lock Washer, ½"
	G10102	4	Hex Nut, ½"-13
21.	GB0323	1	Knife, L.H. (Shown)
	GB0322	-	Knife, R.H.
22.	GA12108	1	Drop Tube, Liquid Fertilizer (Shown)
	GA12109	-	Drop Tube, Liquid Fertilizer
23.	GA8983	-	Check Valve, Low Rate
24.	GA9565	1	Mount W/U-Bolts, Liquid Fertilizer
	GD1113	2	U-Bolt, 5" x 7" x ⅝"-11
	G10230	4	Lock Washer, ⅝"
	G10104	4	Hex Nut, ⅝"-11

RESIDUE WHEEL ATTACHMENT FOR NOTCHED SINGLE DISC FERTILIZER OPENER

DFC024(FRTZ165I)

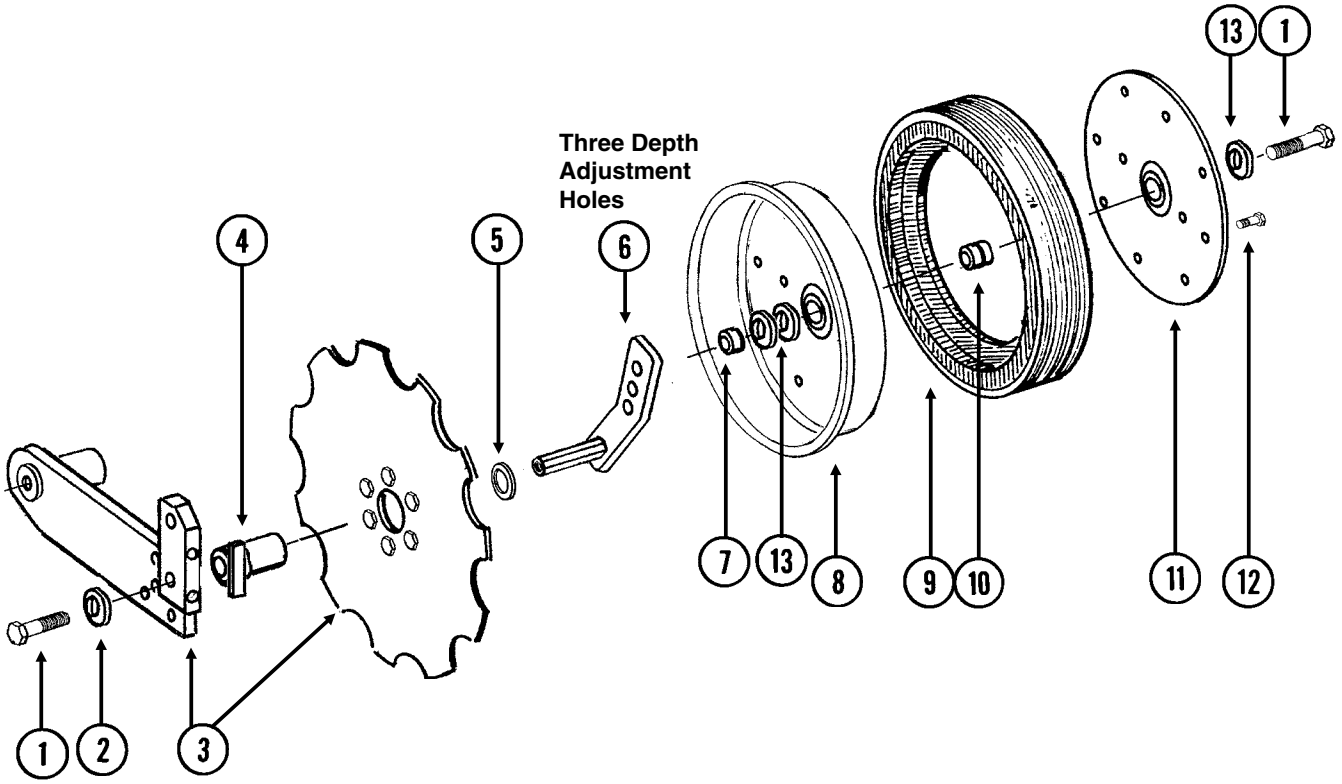


RESIDUE WHEEL ATTACHMENT FOR NOTCHED SINGLE DISC FERTILIZER OPENER

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.		-	See “Notched Single Disc Fertilizer Opener”, Pages P98 And P99
2.	GD12684	1	Bushing, 1 ⅓" Long
3.	GD11178	1	Adjustment Lever
4.	G10603	2	Spring Pin, ¼" x 1 ¼"
5.	G11034	1	Hex Head Cap Screw, ½"-13 x 7"
	G10111	1	Lock Nut, ½"-13
6.	G10830	1	Hex Head Cap Screw, ⅝"-11 x 7 ½"
	GD7805	1	Special Washer, ⅝", Hardened
	G10107	1	Lock Nut, ⅝"-11
7.	GD11836	1	Sleeve, 2 ⅛" Long
8.	GD7962	1	Spring
9.	G10306	1	Carriage Bolt, ⅜"-16 x 2"
	G10203	1	Washer, ⅜" SAE
	G10108	1	Lock Nut, ⅜"-16
10.	GA7999	1	Mount W/Grease Fitting, L.H. (Shown)
	GA7998	-	Mount W/Grease Fitting, R.H.
	G10640	-	Grease Fitting, ¼"-28
11.	G10133	6	Hex Head Cap Screw, 5⁄16"-18 x 1 ½"
	G10109	6	Lock Nut, 5⁄16"-18, Grade 8
12.	GD1132	2	Dust Cap
13.	GD10552	2	Wheel, 12 Tine, ⅜" x 12"
14.	GA5654	1	Hub W/Bearings
	GA2014	-	Bearing
15.	GD9724	1	Backing Plate
16.	GD7817-04	1	Spacer, 11⁄16" I.D. x ½" Long
17.	GD11188	1	Spacer
18.	G10908	1	Carriage Bolt, ⅝"-11 x 3"
	G10503	1	Hex Jam Nut, ⅝"-11, Grade 2
19.	GD11265	1	Spring, L.H. (Shown)
	GD11266	-	Spring, R.H.
A.	GA7445	-	Wheel Assembly, 12 Tine, L.H. (Items 11 And 13-15)(Shown)
	GA7446	-	Wheel Assembly, 12 Tine, R.H. (Items 11 And 13-15)

DEPTH/GAUGE WHEEL ATTACHMENT FOR NOTCHED SINGLE DISC FERTILIZER OPENER

(FRTZ256)

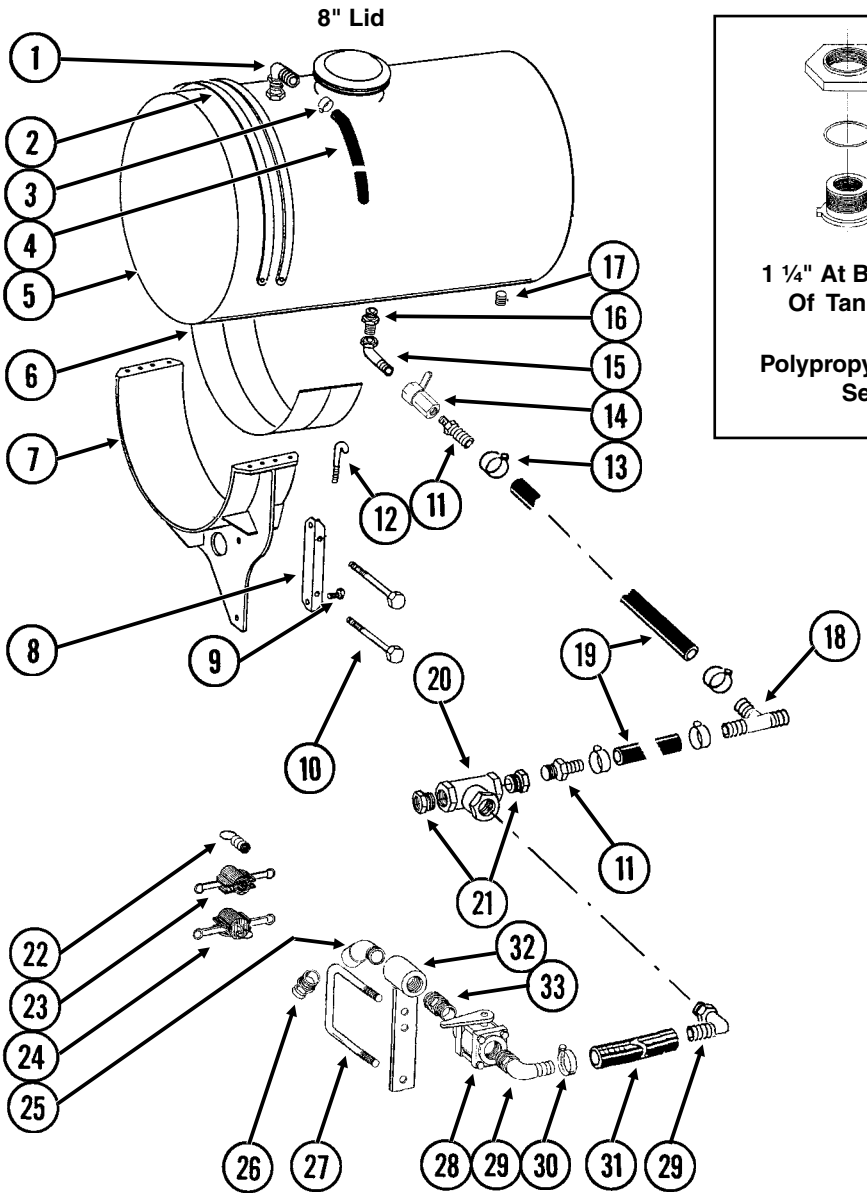


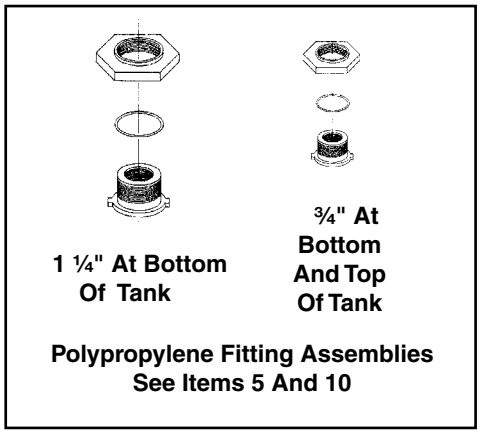
DEPTH/GAUGE WHEEL ATTACHMENT FOR NOTCHED SINGLE DISC FERTILIZER OPENER

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	G10010	2	Hex Head Cap Screw, 5/8"-11 x 3"
2.	GD7805	1	Special Washer, 5/8", Hardened
3.		-	See “Notched Single Disc Fertilizer Opener”, Pages P98 And P99
4.	GA9472	1	Blade Mount
5.	G10233	1	Machine Bushing, 1", 10 Gauge
6.	GA10037	1	Wheel Mount, L.H. (Shown)
	GA10036	1	Wheel Mount, R.H.
7.	GD13309	1	Spacer
8.	GD11423	1	Half Wheel
9.	GD11953	1	Offset Tire
10.	GA6171	1	Bearing
11.	GD11954	1	Half Wheel Cover, Nylon
12.	G10961	11	Flanged Whiz Lock Screw, 5/16"-18 x 3/4", No Serration
	G10620	11	Serrated Flange Nut, 5/16"-18
13.	G10204	-	Special Machine Bushing, 5/8" x 1" O.D. (As Required)
A.	GA8877	-	Gauge Wheel Complete (Items 8-12)

LIQUID FERTILIZER TANKS, SADDLES, SADDLE MOUNTS AND HOSES

LFC021/LFC023/LFC030/LFC012(FRTZ201g)





ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10917	2	Elbow, 90°, ¾" NPT To Barb
2.	GD1520	-	Band, 30" (4 Per Tank)
3.	G10278	2	Hose Clamp, No. 16
4.	G4205-11	-	Hose, ¾" x 72" (One Per Tank)
5.	GA9905	4	Tank W/Lid And Fittings, 30" x 150 Gallon,
	GR1678	-	Lid W/Vent, 8" (Top Of Tank)
	GR0513	-	¾" Polypropylene Fitting Assembly (Overflow Fitting, Nut, Bushing And O-Ring) (Top And Bottom Of Tank)
	GR1397	-	Overflow Fitting
	GR0508		1 ¼" Polypropylene Fitting Assembly (Nut, Bushing And O-Ring) (Bottom Of Tank)

LIQUID FERTILIZER TANKS, SADDLES, SADDLE MOUNTS AND HOSES

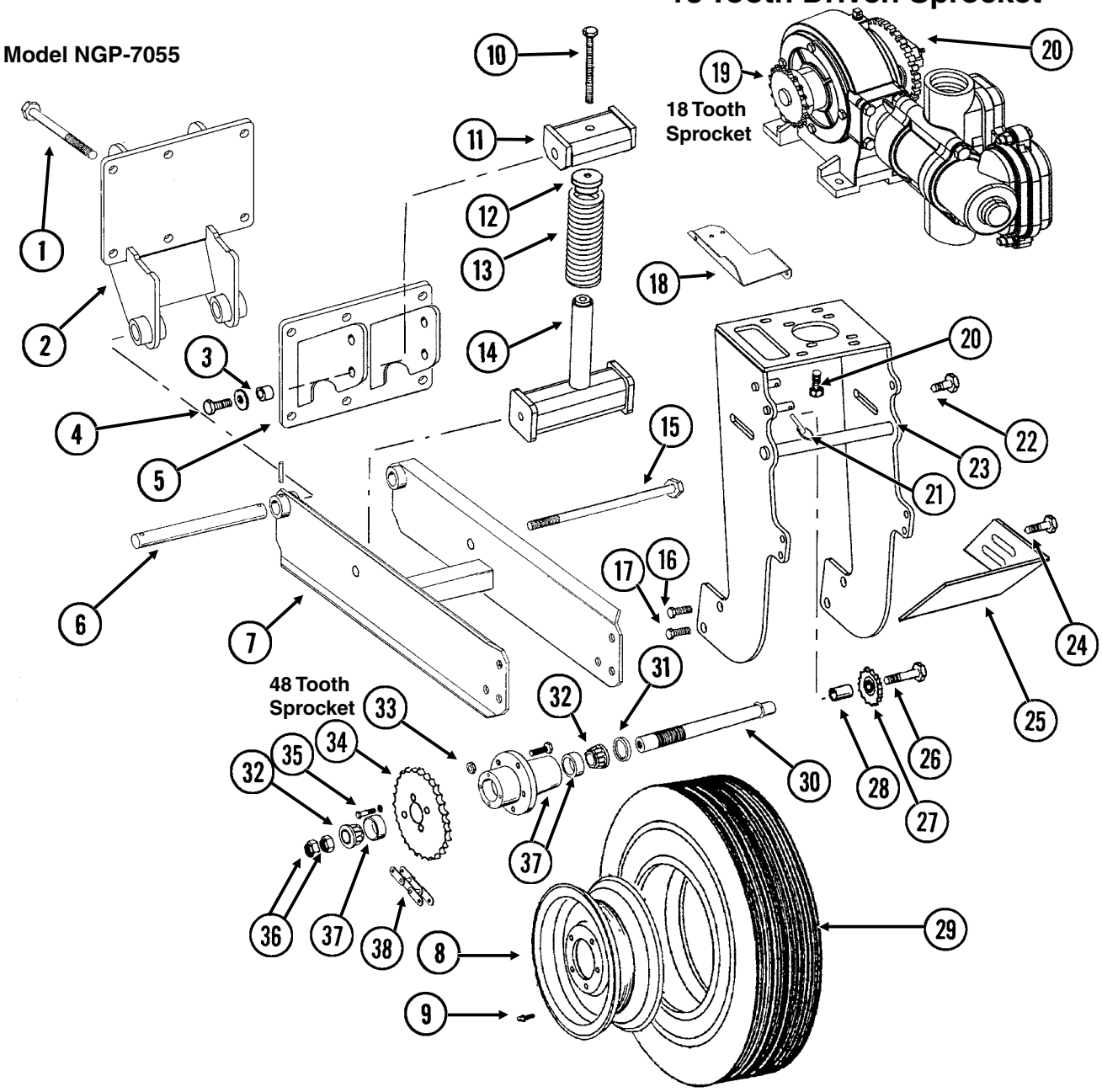
ITEM	PART NO.	QTY.	DESCRIPTION
6.	GD1862	-	Pad, 8" x 14' (For Two 30" Tanks)
7.	GA7133	-	Tank Mount (2 Per Tank)
8.	GD10110	-	Mounting Angle (2 Per Tank)
9.	G10007	-	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
	G10230	-	Lock Washer, 5/8"
	G10104	-	Hex Nut, 5/8"-11
10.	G10342	-	Hex Head Cap Screw, 3/4"-10 x 8"
	G10218	-	Washer, 3/4" USS
	G10231	-	Lock Washer, 3/4"
	G10105	-	Hex Nut, 3/4"-10
11.	G10626	-	Adapter, 1 1/4" NPT To Barb
12.	GD1337	-	J-Bolt, 5/16"-18 (8 Per Tank)
	G11182	-	Lock Nut W/Nylon Insert, 5/16"-18, Grade 8 (8 Per Tank)
13.	G10674	-	Hose Clamp, No. 24
14.	GA4976	-	Shutoff Valve, 1 1/4" NPT
	GR1015	-	Body O-Ring
	GR1016	-	Stem O-Ring
	GR1017	-	Teflon Seat
	GR1018	-	Ball
	GR1019	-	Handle
15.	G10887	-	Elbow, 90°, 1 1/4" Male NPT To Female
16.	G10619	-	Close Nipple, 1 1/4" NPT
17.	G10096	-	Pipe Plug, 3/4" NPT
18.	G10633	-	Tee, 1 1/4" Barb
19.	G4200-03	1	Hose, 1 1/4" x 32', 12 Row
	G4200-06	-	Hose, 1 1/4" x 40', 16 Row
20.	G10888	-	Tee, 2" Female NPT
21.	G10616	-	Reducing Bushing, 2" Male NPT To 1 1/4" Female
22.	GD10777	-	Dust Plug, 2" Male Cam Lock
23.	GD3622	-	Adapter, 2" Female NPT To Cam Lock
24.	GD3951	-	Dust Cap, 2" Cam Lock
25.	G10889	-	Elbow, 45°, 2" Male NPT To Female
26.	GD3623	-	Adapter, 2" Male NPT To Cam Lock
27.	GD1113	-	U-Bolt, 5" x 7" x 5/8"-11
	G10230	-	Lock Washer, 5/8"
	G10104	-	Hex Nut, 5/8"-11
28.	GA2660	-	Shutoff Valve, 2" NPT
29.	G10630	-	Elbow, 90°, 2" NPT To Barb
30.	G10676	-	Hose Clamp, No. 36, Stainless Steel
31.	G4201-02	-	Hose, 2" x 12', 8 Row
	G4201-03	-	Hose, 2" x 18', 12/16 Row
32.	GA7845	-	Quick Fill Mount, 2"
33.	G10623	-	Close Nipple, 2" NPT

LIQUID FERTILIZER PISTON PUMP MOUNT AND GROUND DRIVE WHEEL

(TWL317b)

Model NGP-7055

48 Tooth Drive Sprocket And 18 Tooth Driven Sprocket



ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10830	6	Hex Head Cap Screw, 5/8"-11 x 7 1/2"
	G10230	6	Lock Washer, 5/8"
	G10104	6	Hex Nut, 5/8"-11
2.	GA10624	1	Wheel Arm Mount
3.	GB0218	2	Bushing, 21/32" I.D. x 7/8" O.D. x 19/32" Long
4.	G10005	2	Hex Head Cap Screw, 5/8"-11 x 1 3/4"
	GD7805	2	Special Washer, 5/8", Hardened
	G10107	2	Lock Nut, 5/8"-11
5.	GA10622	1	Spring Mount
6.	GD2681	1	Pin, 1 1/4" x 13 1/2"
	G10460	2	Cotter Pin, 1/4" x 2"

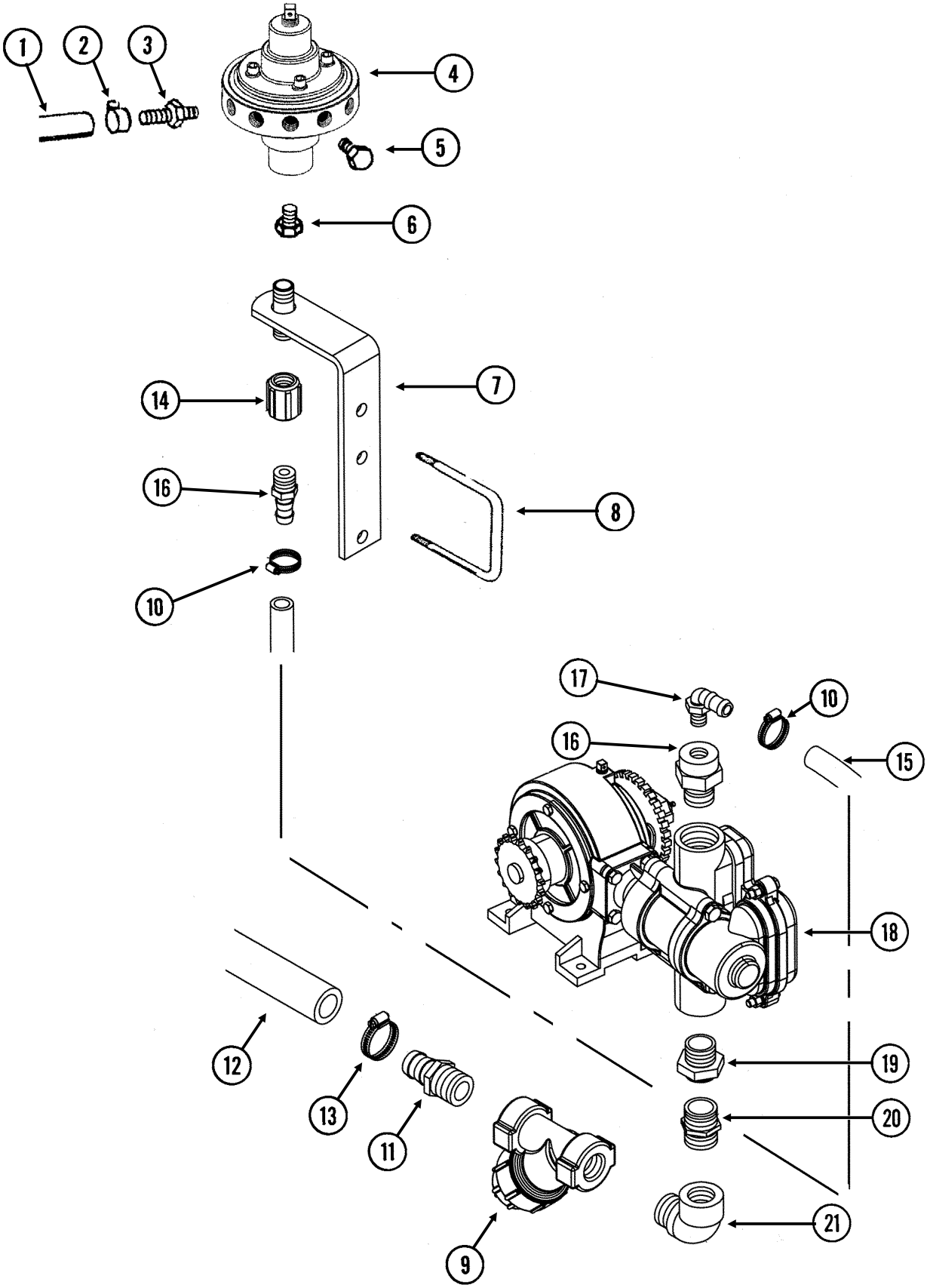
LIQUID FERTILIZER PISTON PUMP MOUNT AND GROUND DRIVE WHEEL

ITEM	PART NO.	QTY.	DESCRIPTION
7.	GA10621	1	Arm W/Grease Fittings
	G10641	2	Grease Fitting, ⅛" NPT
8.	GA0241	1	Wheel, 5" x 15"
9.	GD1166	1	Valve Stem
10.	G10012	1	Hex Head Cap Screw, ⅝"-11 x 6 ½"
	GD7805	1	Special Washer, ⅝", Hardened
11.	GA10908	1	Spring Mount
12.	GB0196	1	Washer
13.	GD7831	1	Compression Spring
14.	GA10907	1	Spring Guide
15.	G11122	1	Hex Head Cap Screw, ⅝"-11 x 12"
	G10107	1	Lock Nut, ⅝"-11
16.	G10026	2	Hex Head Cap Screw, ¾"-10 x 2"
	G10231	2	Lock Washer, ¾"
17.	G11042	2	Hex Head Cap Screw, ¾"-10 x 1 ¾"
	G10231	2	Lock Washer, ¾"
	G10105	2	Hex Nut, ¾"-10
18.	GD13744	1	Hose Holder
19.	GR1146	1	Sprocket, 18 Tooth
20.		-	See “Liquid Fertilizer Piston Pump”, Pages P110 And P111
21.	GD2558	1	Lynch Pin, ¼"
22.	G10007	2	Hex Head Cap Screw, ⅝"-11 x 1 ½"
	G10217	2	Washer, ⅝" USS
	G10230	2	Lock Washer, ⅝"
	G10104	2	Hex Nut, ⅝"-11
23.	GA10894	1	Pump Mount
24.	G10017	2	Hex Head Cap Screw, ½"-13 x 1 ½"
	G10216	2	Washer, ½" USS
	G10228	2	Lock Washer, ½"
	G10102	2	Hex Nut, ½"-13
25.	GD13328	1	Scraper
26.	G10013	1	Hex Head Cap Screw, ⅝"-11 x 3 ½"
	G10205	1	Washer, ⅝" SAE
	G10230	1	Lock Washer, ⅝"
	G10104	1	Hex Nut, ⅝"-11
27.	GA0262	1	Idler Sprocket W/Bearing, 15 Tooth
28.	GD7817-05	1	Spacer, 1 1⁄16" I.D. x 1 ¼" Long
29.	GD0844	1	Tire, 7.60" x 15", 8 Ply (Specify Brand*)
30.	GA2559	1	Spindle
31.	GA0252	2	Seal
32.	GA0251	2	Bearing
33.	GR0267	5	Lug Nut, ½"-20
34.	G2500-84	1	Sprocket, 48 Tooth
35.	G10019	4	Hex Head Cap Screw, 5⁄16"-18 x 1"
	G10232	4	Lock Washer, 5⁄16"
36.	GD0831	2	Shoulder Nut, 1 ¼"-12 UNF-2A
37.	GA0547	1	Hub W/Cups And Studs, 5 Bolt
	GR0190	2	Cup
	GR0204	5	Stud
38.	G3200-63	-	Chain, No. 2050, 63 Pitch Including Connector And Offset Link, Used With NGP-7075 Piston Pump
	GR0195	-	Connector Link, No. 2050
	GR0200	`-	Offset Link, No. 2050

*** Specific brand requests will be supplied only as available from current KINZE® Repair Parts stock. If a specific brand requested is not in stock, the brand available will be supplied. Different brand tires may have different diameters. Change in tire brand may affect rates. Field checks are recommended after any change in tires.**

LIQUID FERTILIZER FLOW DIVIDER MOUNT AND HOSES

(FRTZ280/FRTZ298)



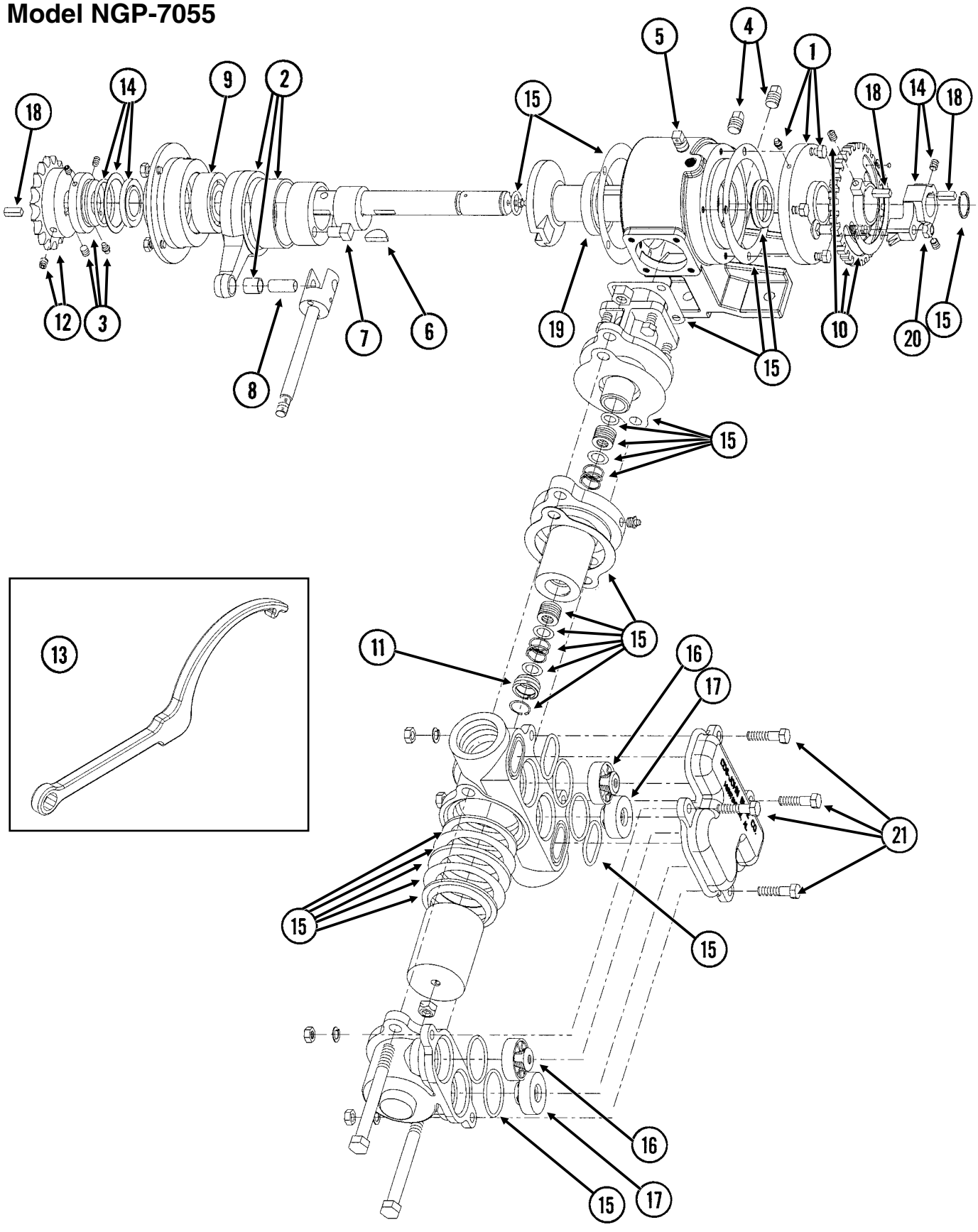
LIQUID FERTILIZER FLOW DIVIDER MOUNT AND HOSES

ITEM	PART NO.	QTY.	DESCRIPTION
1.	G4301-06	1	Hose, ⅜" x 160', 12 Row
	G4301-05	1-2	Hose, ⅜" x 120', 16 Row
2.	G10681	-	Hose Clamp, No. 6
3.	GD11700	-	Adapter, ¼" NPT To ⅜" Barb
4.		-	See “Liquid Fertilizer Piston Pump Flow Divider”, Pages P112 And P113
5.	G10292	-	Pipe Plug, ¼" NPT
6.	G10995	1	Reducing Bushing, 1" Male NPT To ¾" Female, Stainless Steel (If Applicable)
7.	GA6527	1	Mount, ¾" NPT
8.	GD1113	1	U-Bolt, 5" x 7" x ⅝"-11
	G10230	2	Lock Washer, ⅝"
	G10104	2	Hex Nut, ⅝"-11
9.	GA3893	1	Strainer Complete
	GR0880	-	Screen, No. 40 Mesh
	GR0881	-	Gasket
	GR0882	-	Y-Body
	GR0883	-	End Cap
10.	G10278	-	Hose Clamp, No. 16
11.	G10626	2	Adapter, 1 ¼" NPT To Barb
12.		-	See “Liquid Fertilizer Tanks, Saddles, Saddle Mounts And Hoses”, Pages P104 And P105
13.	G10674	2	Hose Clamp, No. 24
14.	G11083	1	Coupler, ¾" Female NPT
15.	G4205-10	-	Hose, ¾" x 200"
16.	G11237	1	Reducing Bushing, 1 ½" Male NPT To ¾" Female
17.	G10917	1	Elbow, 90°, ¾" NPT To Barb
18.		-	See ”Liquid Fertilizer Piston Pump”, Pages P110 And P111
19.	G10615	1	Reducing Bushing, 1 ½" Male NPT To 1 ¼" Female
20.	G10619	1	Close Nipple, 1 ¼" NPT
21.	G10887	1	Elbow, 90°, 1 ¼" Male NPT To Female

LIQUID FERTILIZER PISTON PUMP
Uses 18 Tooth Sprocket

(A12335a/GR1808)

Model NGP-7055



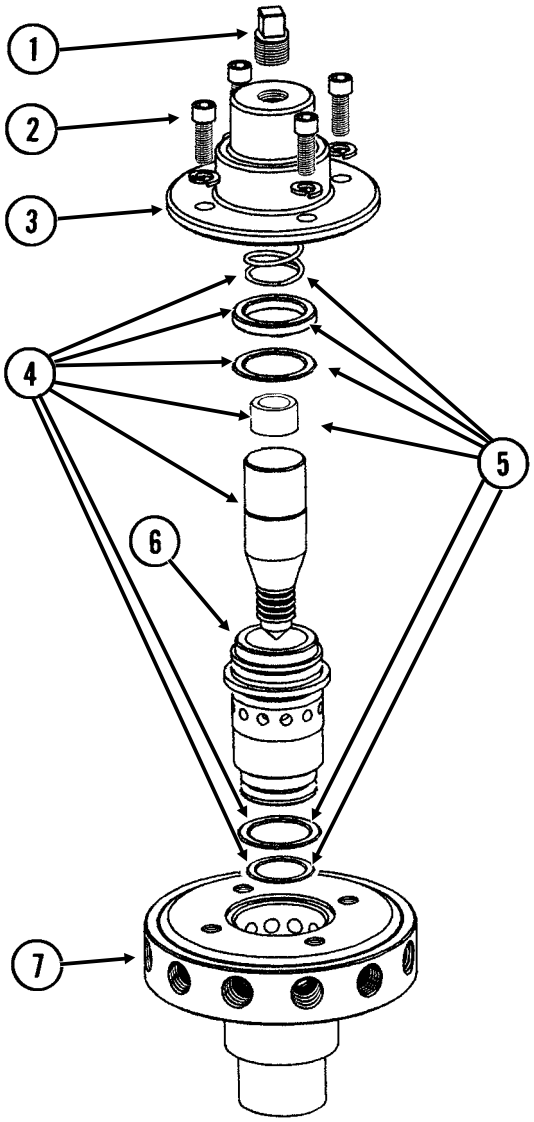
LIQUID FERTILIZER PISTON PUMP
Uses 18 Tooth Sprocket

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR1804	1	Flange Cover Assembly
	G10991	4	Hex Head Cap Screw, 5/16"-18 x 7/8"
2.	GR1803	1	Connecting Rod Assembly
3.	GR1801	1	Spacer Assembly
	G10693	3	Hex Socket Head Set Screw, 5/16"-18 x 3/8"
4.	GR1123	2	Plug
5.	GR1543	1	Vent Plug
6.	GR1112	1	Woodruff Key
7.	GR1120	1	Eccentric Pin
8.	GR1124	1	Pin
9.	GR1104	1	Bearing
10.	GR1805	1	Setting Hub Assembly
11.	GR1134	1	Stuffing Box Insert
12.	GR1146	1	Sprocket, 18 Tooth
13.	GR1808	1	Adjustment Wrench
14.	GR1806	1	Setting Pointer Assembly
15.	GR1796	1	Repair Kit, Includes: (6) Gaskets, (9) O-Rings, (4) Washers, (1) Retaining Ring, (2) Oil Seals, (1) Snap Ring, (1) Thrust Washer, (1) Rod Bushing, (2) Flange Plunger Packings, (2) Packing Springs, (2) Rod Vee Packing Sets
16.	GR1800	2	Discharge Valve Assembly
17.	GR1798	2	Suction Valve Assembly
18.	GR1118	3	Setting Arm Key
19.	GR1116	1	Bearing
20.	G10306	1	Carriage Bolt, 3/8"-16 x 2"
	G10108	1	Lock Nut, 3/8"-16
21.	G10003	4	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G10210	4	Washer, 3/8" USS
	G10229	4	Lock Washer, 3/8"
	G10101	4	Hex Nut, 3/8"-16
A.	GA12335	-	Piston Pump Complete W/18 Tooth Sprocket (Model NGP-7055)

LIQUID FERTILIZER PISTON PUMP FLOW DIVIDER

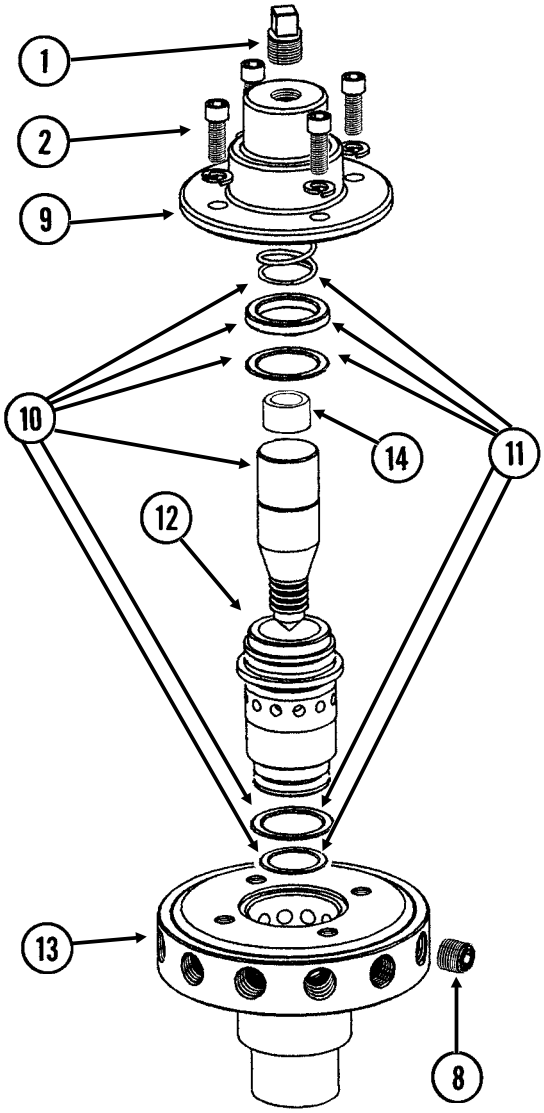
(FRTZ159/PT40a/FRTZ202c)

Model FD-1200 Flow Divider, 12 Outlet



¾" NPT

Model FD-2000 Flow Divider, 20 Outlet



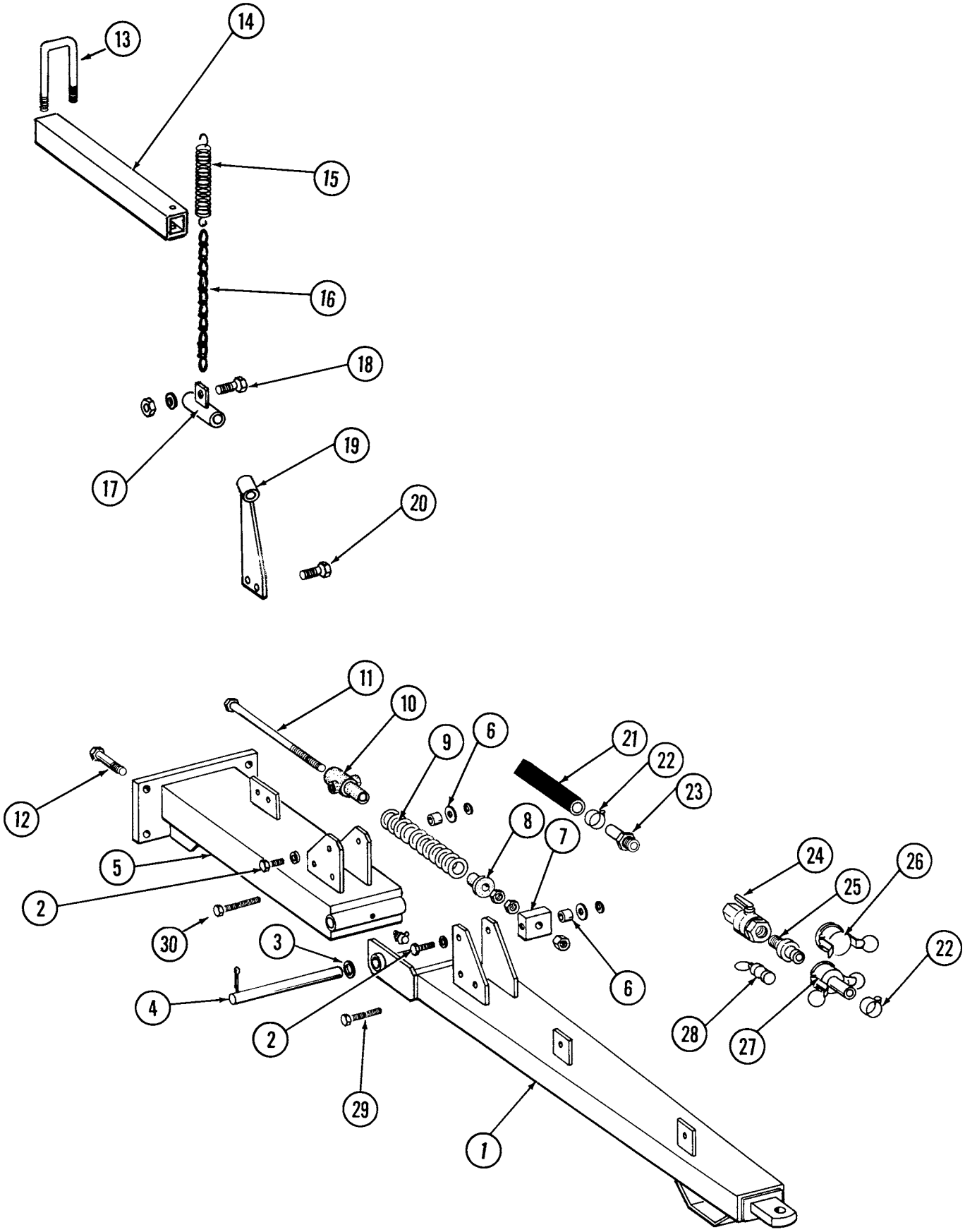
1" NPT

LIQUID FERTILIZER PISTON PUMP FLOW DIVIDER

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR1543	1	Vent Plug
2.	GR1542	4	Hex Socket Head Screw, ¼"-20 x ¾", Stainless Steel
	GR1541	4	Lock Washer, ¼", Stainless Steel
3.	GR1540	1	Cap
4.	GR1544	1	Needle Assembly W/Seal Kit (Item 22)
5.	GR1545	1	Seal Kit, Includes: (3) O-Rings, (1) Seal, (1) Spring, (1) Stainless Steel Sleeve
6.	GR1535	1	Sleeve
7.	GR1533	1	Body, (12 Outlets)
8.	G10350	4	Hex Socket Head Plug, ¼" NPT, Stainless Steel
9.	GR1566	1	Cap
10.	GR1567	1	Needle Assembly W/Seal Kit (Item 22)
11.	GR1568	1	Seal Kit, Includes: (3) O-Rings, (1) Seal, (1) Spring
12.	GR1561	1	Sleeve
13.	GR1559	1	Body, (20 Outlets)
14.	GR1574	1	Sleeve, 1" O.D. x ½" Long, Stainless Steel
A.	GA8931	1	Liquid Fertilizer Piston Pump Flow Divider Complete, 12 Outlet (Model FD-1200) (Items 1-7) (12 Row Planters)
B.	GA9407	1	Liquid Fertilizer Piston Pump Flow Divider Complete, 20 Outlet (Model FD-2000) (Items 1, 2 And 8-14) (16 Row Planters)

REAR TRAILER HITCH

PHA032/LFC003(TWL47a)



REAR TRAILER HITCH

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA6961	1	Hitch
2.	G10007	4	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
	GD7805	4	Special Washer, 5/8", Hardened
	G10230	4	Lock Washer, 5/8"
3.	G10226	2	Washer, 1 1/4" SAE
4.	GD3547	1	Pin, 1 1/4" x 12 3/4"
	G10460	2	Cotter Pin, 1/4" x 2"
5.	GA6960	1	Hitch
6.	GB0218	4	Bushing, 21/32" I.D. x 7/8" O.D. x 19/32" Long
7.	GD7908	1	Tap Block
8.	GB0213	1	Spring Seat
9.	GD2115	1	Spring
10.	GB0206	1	Rod Guide
11.	GD7907	1	Special Bolt
	G10105	3	Hex Nut, 3/4"-10
12.	G10826	5	Hex Head Cap Screw, 1"-8 x 2 1/2"
	G10396	5	Lock Nut, 1"-8
13.	GD2721	2	U-Bolt, 2" x 2" x 1/2"-13
	G10228	4	Lock Washer, 1/2"
	G10102	4	Hex Nut, 1/2"-13
14.	GD10196	-	Hanger Tube
15.	GD0829	-	Spring
16.	G3305-03	-	Twin Loop Chain, 15 Links
17.	GA7209	-	Hose Support
18.	G10064	1	Hex Head Cap Screw, 1/4"-20 x 1"
	G10209	2	Washer, 1/4" USS
	G10110	1	Lock Nut, 1/4"-20, Grade B
19.	GA7208	-	Hose Support
20.	G10004	2	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
	G10108	2	Lock Nut, 3/8"-16
21.	G4200-01	1	Hose, 1 1/4" x 22'
22.	G10672	6	Hose Clamp, No. 28
23.	G10626	1	Adapter, 1 1/4" NPT To Barb
24.	GA4976	1	Shutoff Valve, 1 1/4" NPT
	GR1015	-	Body O-Ring
	GR1016	-	Stem O-Ring
	GR1017	-	Teflon Seat
	GR1018	-	Ball
	GR1019	-	Handle
25.	GD1514	1	Adapter, 1 1/4" Male NPT To Cam Lock
26.	GD1515	1	Dust Cap, 1 1/4" Cam Lock
27.	GD1516	1	Adapter, 1 1/4" Barb To Female Cam Lock
28.	GD1517	1	Dust Plug, 1 1/4" Male Cam Lock
29.	G10172	1	Hex Head Cap Screw, 3/8"-16 x 5"
	G10229	1	Lock Washer, 3/8"
	G10101	1	Hex Nut, 3/8"-16
30.	G10756	1	Hex Head Cap Screw, 3/8"-16 x 6"
	G10229	1	Lock Washer, 3/8"
	G10101	1	Hex Nut, 3/8"-16

DECALS, PAINT AND MISCELLANEOUS



1



2



3



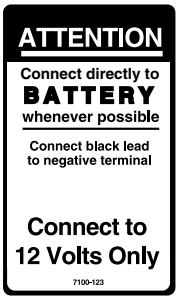
4



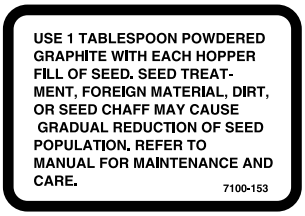
5



6



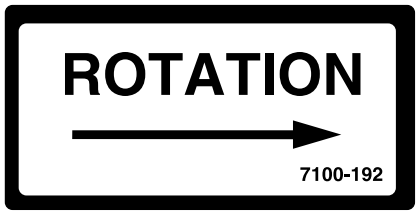
7



8



9



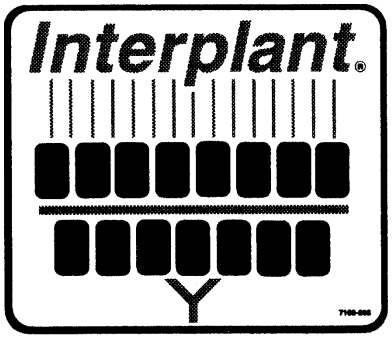
10



11



12



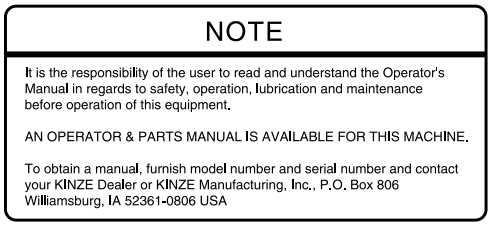
13



15



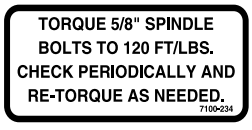
14



16



17



18



19



20

DECALS, PAINT AND MISCELLANEOUS

ROTATE KNURLED COLLAR
ON WRAP SPRING TIGHTENER
TO RELEASE SPRING
TENSION
7100-295

21

⚠CAUTION⚠

SET DOWN PRESSURE SPRINGS TO MINIMUM. LOWER PLANTER TO GROUND AND EMPTY SEED HOPPERS. REQUIRES 90 LB MIN TO LIFT . 7100-249

22

⚠WARNING

TO AVOID INJURY --
STAND CLEAR--KEEP OTHERS AWAY WHEN RAISING OR LOWERING MARKERS. BEFORE TRANSPORTING PLANTER FULLY EXTEND HYDRAULIC CYLINDERS AND INSTALL LOCKING PINS WHERE PROVIDED.
7100-42

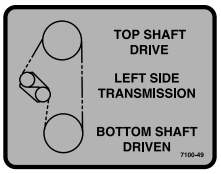
23

⚠WARNING⚠

1. Read and understand the Operator's Manual.
2. Stop the tractor engine before leaving the operator's platform.
3. Keep riders off the machine.
4. Make certain everyone is clear of the machine before starting the tractor engine and operating.
5. Keep all shields in place.
6. Never lubricate, adjust, unclog or service the machine with tractor engine running.
7. Wait for all movement to stop before servicing.
8. Keep hands, feet and clothing away from moving parts.
9. Use flashing warning lights when operating on highways except when prohibited by law.

7100-46

24



25

⚠WARNING

USE SAFETY CHAINS PROVIDED. TOW ONLY WITH FARM TRACTOR.
7100-302

26

⚠CAUTION⚠

REAR OF PLANTER SWINGS WIDE IN TURNS. ALWAYS ALLOW SUFFICIENT ROOM TO CLEAR OBSTACLES WHEN TURNING. 7100-63

27

⚠CAUTION⚠

AVOID UNEVEN LOADING OF HOPPERS, ESPECIALLY DURING TRANSPORT
7100-75

29

⚠WARNING⚠

TO AVOID INJURY
ALWAYS USE HYDRAULIC CYLINDER SAFETY LOCKOUT CHANNELS WHEN TRANSPORTING PLANTER ON THE ROAD. AFTER USE RETURN TO STORAGE LOCATION. 7100-83

30

⚠WARNING⚠

NEVER WALK UNDER OR WORK ON PLANTER WHEN IT IS RAISED WITHOUT SUPPORTING THE FRAMES WITH ADDITIONAL SUPPORTS.
7100-68

28

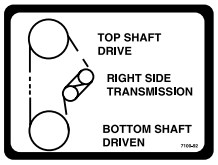
⚠WARNING⚠

THIS MACHINE HAS BEEN DESIGNED AND BUILT WITH YOUR SAFETY IN MIND. DO NOT MAKE ANY ALTERATIONS OR CHANGES TO THIS MACHINE. ANY ALTERATION TO THE DESIGN OR CONSTRUCTION MAY CREATE SAFETY HAZARDS. 7100-90

32



31



33

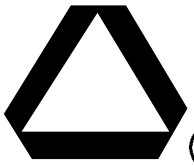
A A

34

35



36



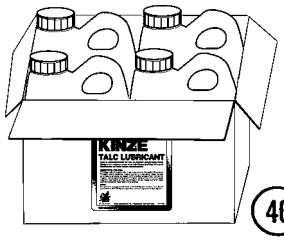
37



38



39



40

41

DECALS, PAINT AND MISCELLANEOUS

ITEM	PART NO.	QTY.	DESCRIPTION
1.	G7100-02	3	Decal, Warning
2.	G7100-110	-	Decal, Grease Weekly
3.	G7100-111	-	Decal, Oil Daily
4.	G7100-115	-	Decal, Warning (1 Per Granular Chemical Hopper)
5.	G7100-116	-	Decal, Grease Daily
6.	G7100-117	1	Decal, Danger
7.	G7100-123	1	Decal, Attention
8.	G7100-153	-	Decal, Information (1 Per Brush-Type Seed Meter)
9.	G7100-177	1	Decal, Twin-Line®, ¾" x 3"
10.	G7100-192	-	Decal, Point Row Clutch Rotation
11.	G7100-200	-	Decal, Warning
12.	G7100-201	1	Decal, Information
13.	G7100-208	-	Decal, Interplant®
14.	G7100-258	-	Reflective Decal, Red, 1 ½" x 9", Rectangular (If Applicable)
	G7100-259	-	Reflective Decal, Amber, 1 ½" x 9", Rectangular (If Applicable)
	G7100-260	-	Reflective Decal, Orange, 1 ½" x 9", Rectangular (If Applicable)
15.	G7100-215	1	Decal, Danger
16.	G7100-217	-	Decal, Note
17.	G7100-219	-	Decal, Warning
18.	G7100-234	-	Decal, Bolt Torque
19.	G7100-333	2	Decal, KINZE® 3600V
20.	G7100-247	-	Decal, Logo, 4 ⅜" x 4 ½" (2 Per Row Unit)
	G7100-252	-	Decal, Logo, 3 ½" x 3 ⅝" (Hopper Panel Extension)
21.	G7100-295	-	Decal, Spring Tension Release
22.	G7100-249	-	Decal, Caution
23.	G7100-42	4	Decal, Warning
24.	G7100-46	1	Decal, Warning
25.	G7100-49	1	Decal, Left Side Transmission
26.	G7100-302	1	Decal, Warning
27.	G7100-63	2	Decal, Caution
28.	G7100-68	3	Decal, Warning
29.	G7100-75	4	Decal, Caution
30.	G7100-83	2	Decal, Warning (1 Per Marker Lockup)
31.	G7100-261	-	Reflective Decal, Red, 1 ¾" x 9", Die-Cut (If Applicable)
	G7100-262	-	Reflective Decal, Amber, 1 ¾" x 9", Die-Cut (If Applicable)
	G7100-263	-	Reflective Decal, Orange, 1 ¾" x 9", Die-Cut (If Applicable)
32.	G7100-90	1	Decal, Warning
33.	G7100-92	1	Decal, Right Side Transmission
34.	GD10057-01	-	Hose Identification Sleeve, Red AA
	GD10057-02	-	Hose Identification Sleeve, Red BB
	GD10057-03	-	Hose Identification Sleeve, Blue AA
	GD10057-04	-	Hose Identification Sleeve, Blue BB
35.	GM0212	-	Operator & Parts Manual, Model 3600V (Mechanical Seed Metering)
36.	GD1512	-	Tie Strap, 7 ½"
	GD2117	-	Tie Strap, 14 ½"
	GD1162	-	Tie Strap, 28"
	GD2984	-	Tie Strap, 34"
37.	GD2199	1	SMV Sign
38.	GR0146	-	Powdered Graphite, 1 Pound Container
	GR0146MPP	-	Powdered Graphite, Twenty-Four 1 Pound Containers
39.	GR0155	-	Blue Paint, Aerosol Can
	GR0155MPP	-	Blue Paint, Twelve Aerosol Cans
40.	GR1570MPP	-	Talc Lubricant, Four 8 Pound Containers