MODEL 3650
TWIN-LINE® PLANTER

OPERATOR & PARTS MANUAL

M0175 2/02

This manual is applicable to: Model: 3650 Twin-Line® Planters
Serial Number: Prior To 655105

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

Model Number 3650

Serial Number _____

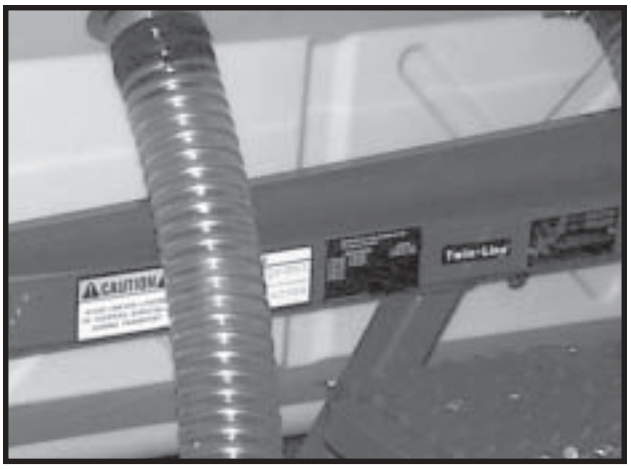
Date Purchased _____

SERIAL NUMBER

The serial number plate is located on the planter frame to be readily available. It is suggested that the 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.

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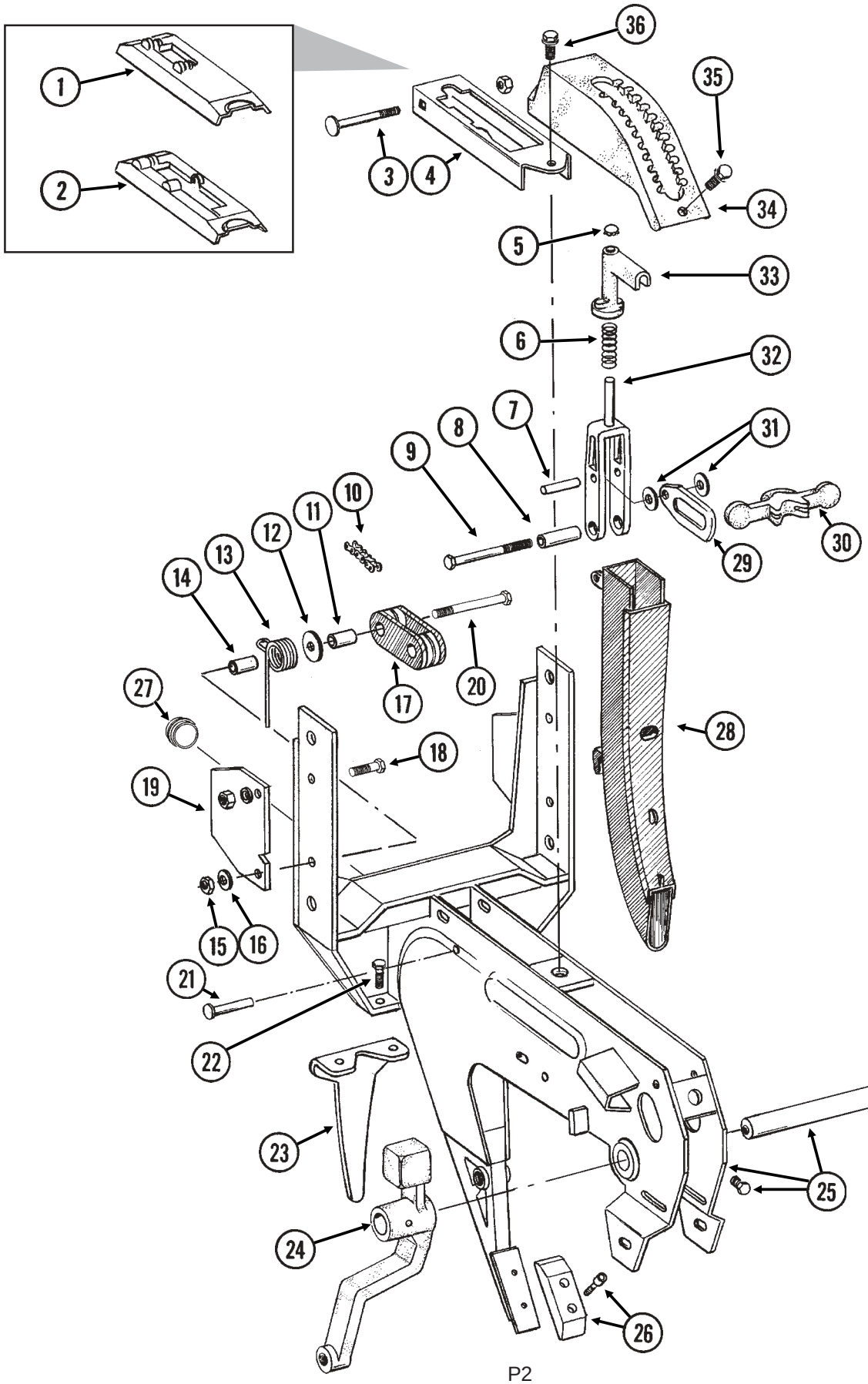
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SHANK ASSEMBLY, SEED TUBE AND DEPTH ADJUSTMENT

RUB023/RUB024RUB022(RU80i)

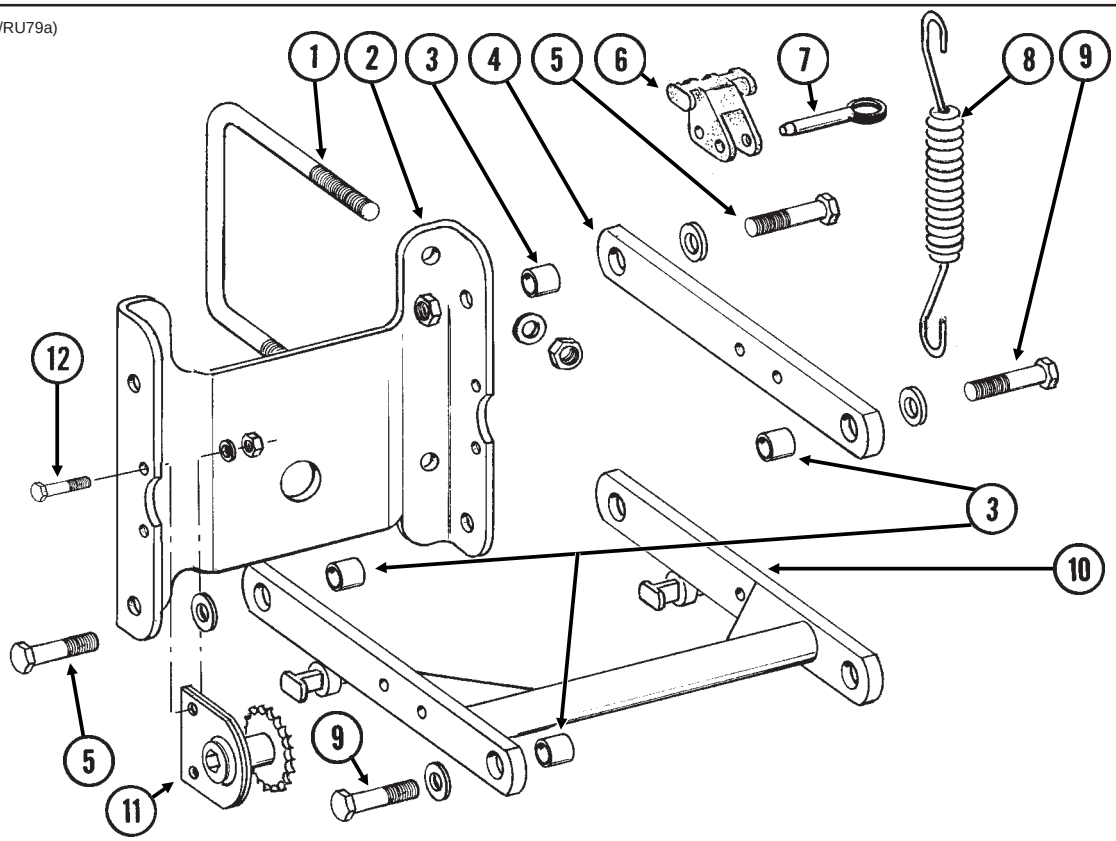


SHANK ASSEMBLY, SEED TUBE AND DEPTH ADJUSTMENT

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.		-	Shank Cover, See “Brush-Type Seed Meter”, Page P23
2.		-	Shank Cover, See “Finger Pickup Seed Meter”, Page P22
3.	G10304	1	Carriage Bolt, 3/8"-16 x 3"
	G10108	1	Lock Nut, 3/8"-16
4.	GD10986	1	Cover
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
	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	Flange Nut, 5/16"-18
23.	GD1033	1	Shield
24.		-	See “Gauge Wheels”, Pages P6 And P7
25.	GA7965	1	Shank W/Gauge Wheel Pivot Spindle And Set Screw
	GD11001	-	Spindle
	G10438	-	Hex Head Cap Screw, 1/2"-13 x 3/4"
26.		-	See “15" Seed Opener Disc Blade/Bearing Assembly And Scrapers”, Page P5
27.	GD11845	1	Dust Cap
28.	GD1130	-	Seed Tube (No Monitor) See “KPM I/KPM II Electronic Seed Monitor” Or “KPM II Stack-Mode Electronic Seed Monitor” For Seed Tube With Sensor, Pages P104-P107
29.	GB0285	1	Collar, Depth Adjustment
30.	GB0265	1	Pivot Link, Depth Adjustment
31.	G10207	2	Washer, 7/8" O.D. x 13/32" I.D. x .134" (If Applicable)
32.	GB0267	1	Lever, Depth Adjustment
33.	GB0266	1	Handle, Depth Adjustment
34.	GB0274	1	Cover, Depth Adjustment
35.	G10985	1	Hex Washer Head Cap Screw, 3/8"-16 x 1"
36.	G11015	1	Hex Washer Head Cap Screw, 3/8"-16 x 1 1/4"

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

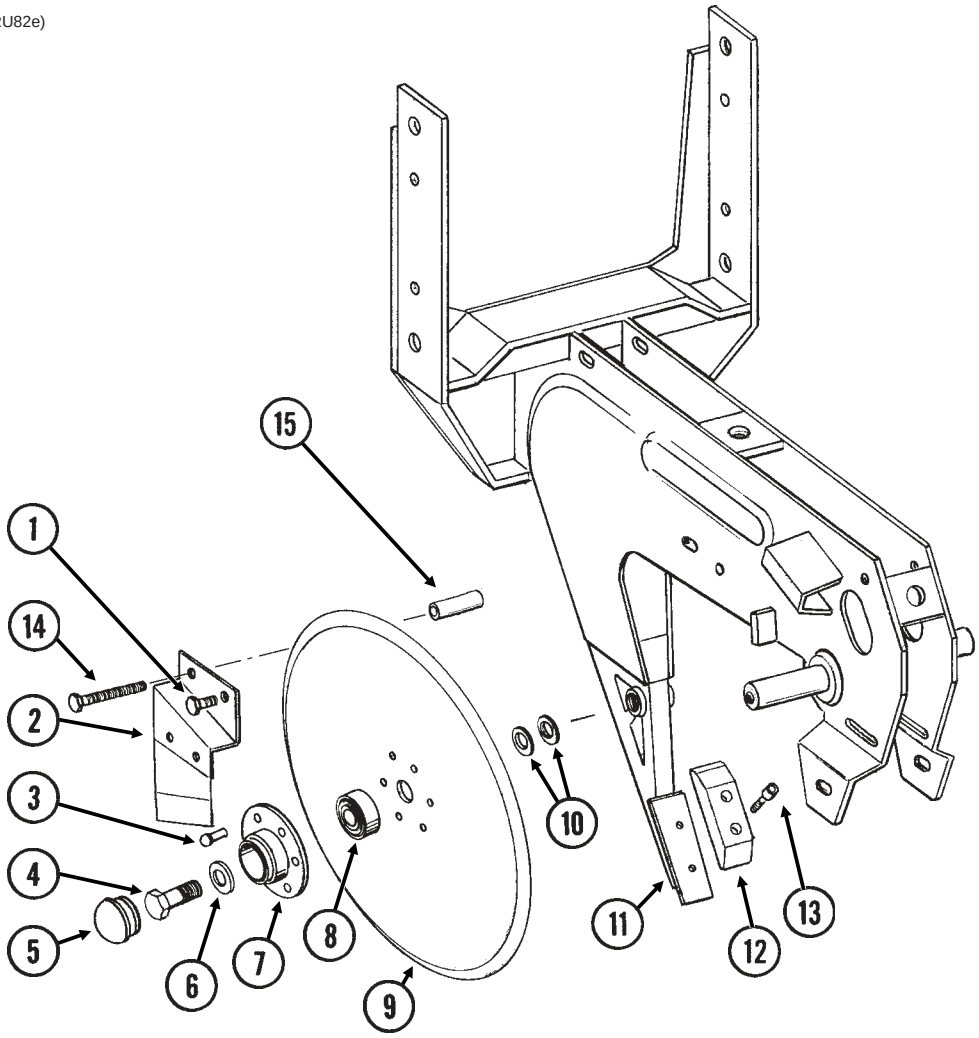
RUB021/RUB022(RU78e/RU79a)



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	GD1113	-	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.	G10545	2	Detent Pin, 1/2" x 1 1/3" Grip
8.	GD8249	2-4	Spring
9.		-	See “Hopper Support And Meter Drive”, Page P9
10.	GA5651	1	Lower Parallel Arm
11.	GA1720	1	Bearing/Sprocket, 7/8" Hex Bore
12.	G10001	2	Hex Head Cap Screw, 3/8"-16 x 1"
	G10229	2	Lock Washer, 3/8"
	G10101	2	Hex Nut, 3/8"-16
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

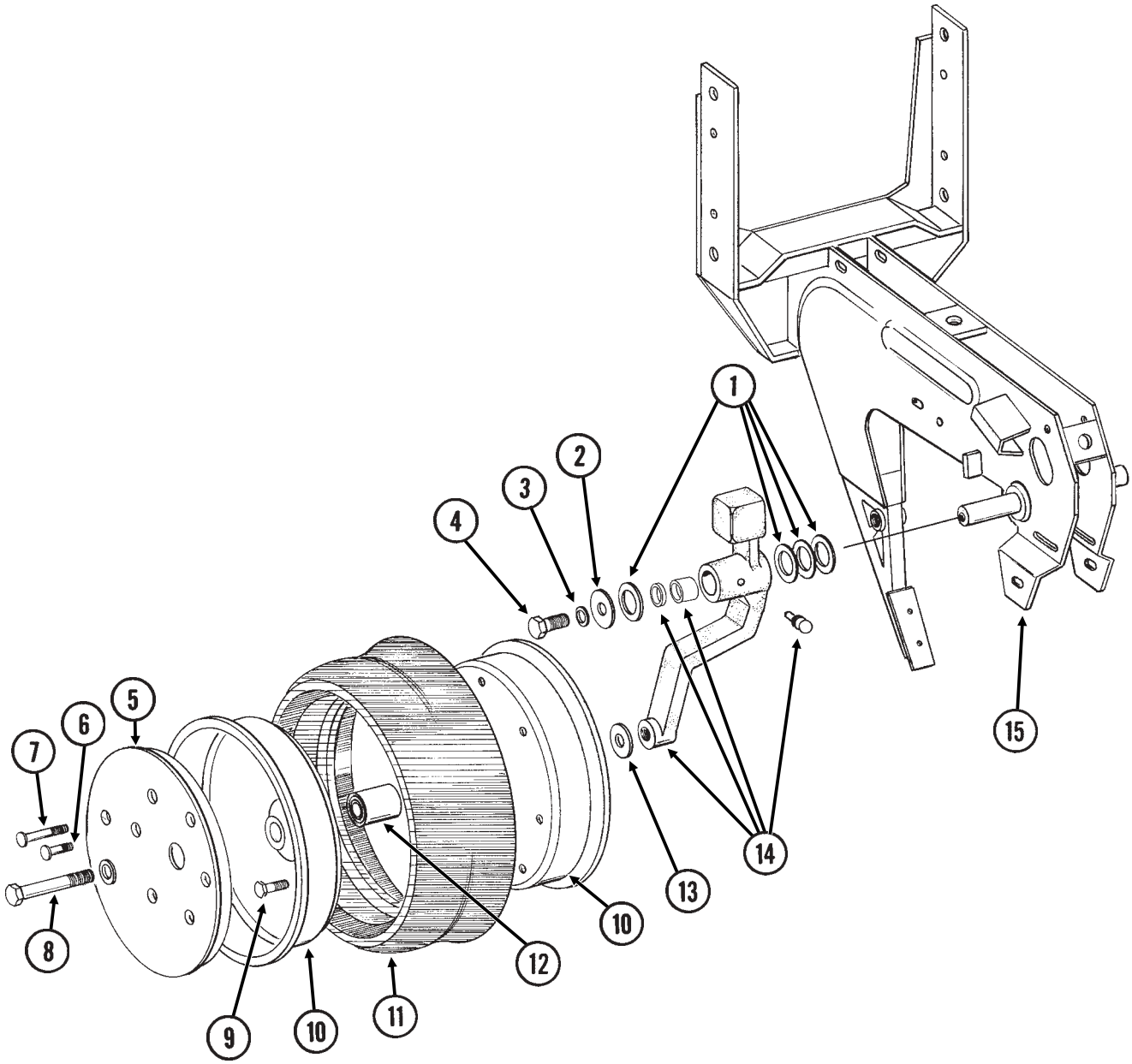
RUB023/RUB025(RU82e)



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10328	2	Hex Head Cap Screw, 3/8"-16 x 5/8"
	G10622	2	Flange Nut, 3/8"-16
2.	GA2012R	1	Disc Scraper, R.H.
	GA2012L	-	Disc Scraper, L.H. (Shown)
3.	G10427	12	Rivet, 1/4" x 1/2"
4.	GD11017	1	Special Hex Head Cap Screw, 5/8"-11 x 1 1/2", L.H. Thread
	G10007	1	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
5.	GD11845	2	Dust Cap
6.	G10204	2	Special Machine Bushing, 5/8" x 1" O.D.
7.	GD10473	2	Bearing Housing
8.	GA2014	2	Bearing
9.	GD11306	2	Disc Blade, 3.5mm x 15"
10.	G10213	-	Machine Bushing, 5/8" (.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, 3/8"-16 x 2 3/4"
	G10622	1	Flange Nut, 3/8"-16
15.	GD11259	1	Sleeve, 3/8" I.D. x 5/8" O.D. x 1 25/32" Long
A.	GA8324	-	Disc Blade And Bearing Assembly Less Bearing Cap (Items 3 And 7-9)

GAUGE WHEELS

RUB027/RUB023(RU84a/RU84b)

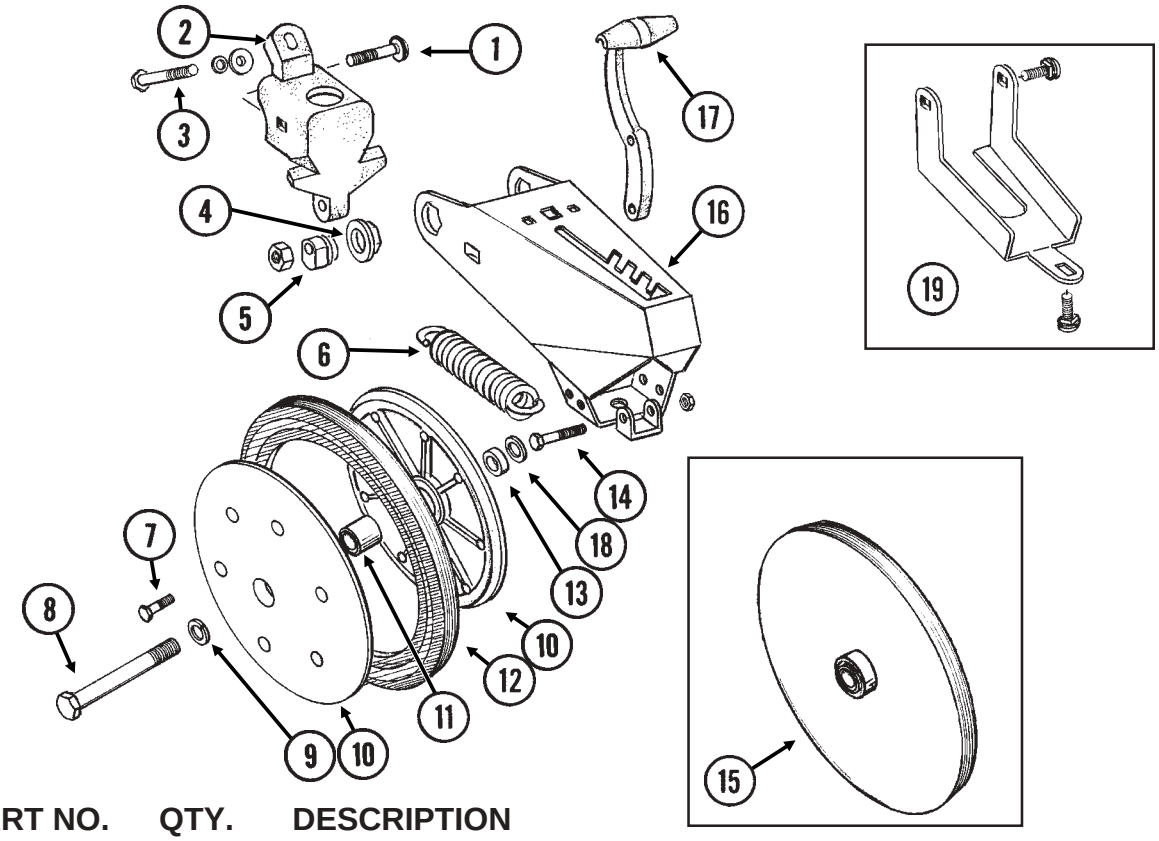


GAUGE WHEELS

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10940	-	Machine Bushing, 1" (.048" Thick)
2.	G10216	2	Washer, 1/2" USS
3.	G10228	2	Lock Washer, 1/2"
4.	G10014	1	Hex Head Cap Screw, 1/2"-13 x 1"
5.	GD11453	2	Cover
6.	G10338	12	Carriage Bolt, 5/16"-18 x 1 1/4"
	G10620	12	Flange Nut, 5/16"-18
7.	G10924	8	Carriage Bolt, 5/16"-18 x 1 3/4"
	G10620	8	Flange Nut, 5/16"-18
8.	G10010	2	Hex Head Cap Screw, 5/8"-11 x 3"
	G10230	2	Lock Washer, 5/8"
9.	G10018	14	Hex Head Cap Screw, 5/16"-18 x 5/8"
	G10109	14	Lock Nut, 5/16"-18
10.	GD11423	4	Half Wheel
11.	GD1086	2	Tire
12.	GA6171	2	Bearing
13.	G10204	2	Special Machine Bushing, 5/8" 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, 1/4"-28 (Per Arm)
	GB0276	2	Bushing, 1" I.D. x 1 1/4" O.D. x 1" Long (Per Arm)
	GD10991	2	Seal (Per Arm)
15.		-	See “Shank Assembly, Seed Tube And Depth Adjustment”, Pages P2 And P3
A.	GA7949	-	Gauge Wheel Complete (Items 5-7 And 9-12)

“V” CLOSING WHEELS

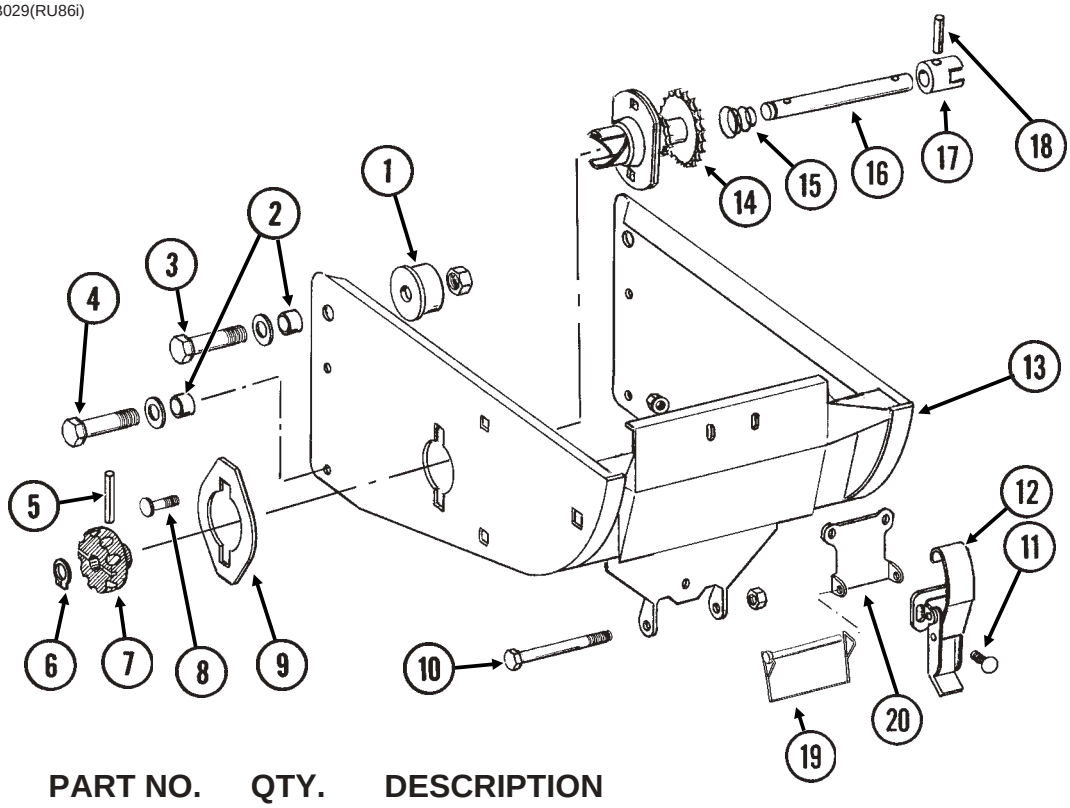
RUB026(RU83e)



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10801	2	Carriage Bolt, 1/2"-13 x 2 1/4"
	G10315	-	Carriage Bolt, 1/2"-13 x 2 1/2" (Used W/Straight Drop In-Furrow Granular Chemical Bracket)
	G10111	2	Lock Nut, 1/2"-13
2.	GB0268	1	Wheel Arm Stop
3.	G10003	1	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G10229	1	Lock Washer, 3/8"
	G10210	2	Washer, 3/8" USS
4.	GB0282	2	Stepped Bushing
5.	GB0239	2	Eccentric Bushing
6.	GD8460	1	Spring
7.	G10064	6	Hex Head Cap Screw, 1/4"-20 x 1"
8.	G10013	2	Hex Head Cap Screw, 5/8"-11 x 3 1/2"
	G10107	2	Lock Nut, 5/8"-11
9.	G10230	2	Lock Washer, 5/8"
10.	GD9120	4	Nylon Half Wheel
11.	GA6171	2	Bearing
12.	GD1085	2	Rubber Tire, 1" x 12"
13.	GD1109	2	Bushing, 41/64" I.D. x 7/8" O.D. x 1/4" Long
14.	G10133	1	Hex Head Cap Screw, 5/16"-18 x 1 1/2"
	G10109	1	Lock Nut, 5/16"-18
15.	GA6597	-	Cast Iron Closing Wheel W/Bearing
	GA6171	-	Bearing
16.	GA8322	1	Arm
17.	GB0254	1	Lever
18.	GD7805	2	Special Washer, 5/8", Hardened
19.	G1K345	-	Closing Wheel Shield Kit W/Hardware And Instruction
	G10308	3	Carriage Bolt, 3/8"-16 x 3/4"
	G10210	1	Washer, 3/8" USS
	G10229	3	Lock Washer, 3/8"
	G10101	3	Hex Nut, 3/8"-16
A.	GA6434	-	Rubber Closing Wheel Complete W/Bearing (Items 7 And 10-12)

HOPPER SUPPORT AND METER DRIVE

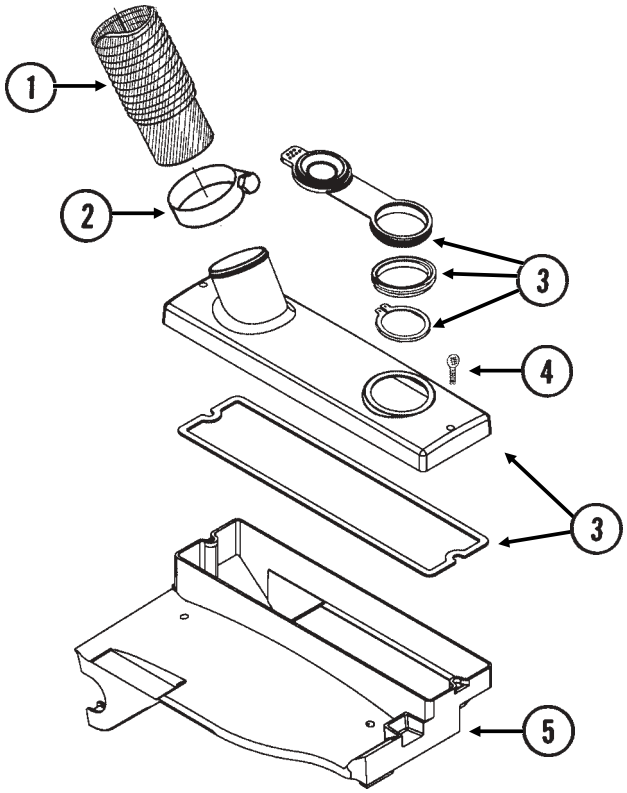
RUB028/RUB029(RU86i)



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	Flange Nut, 5/16"-18
9.	GD11305	1	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	Flange Nut, 1/4"-20
12.	GA2007	1	Hopper Hold Down Latch
13.	GA8304	1	Hopper Support
14.	GA9538	1	Double Sprocket And Bearing, Drive Clutch, 11/19 Tooth
15.	GD11413	1	Spring
16.	GD10958	1	Shaft
17.	GB0278	1	Coupler
18.	G10546	1	Spring Pin, 3/16" x 1 1/4"
19.	GD10705	1	Locking Clip Pin, 1/4" x 2 1/2"
20.	GD13110	1	Retainer
A.	GA9539	-	Meter Drive Assembly Complete (Items 5-7 And 14-18)

MINI-HOPPER AND DROP HOSES

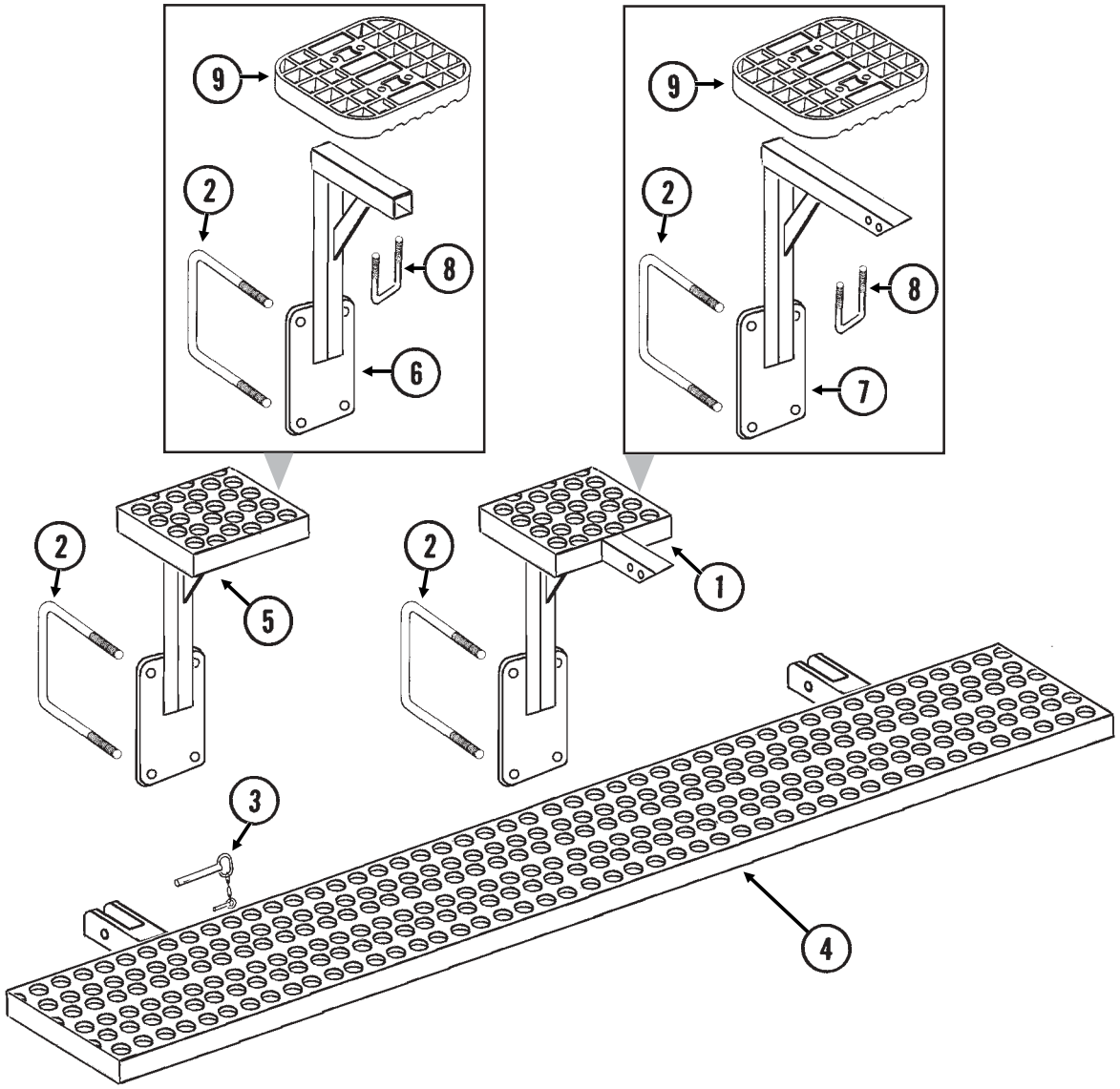
RUB031(TWL189c)



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	GD12797-01	1	Drop Hose, 3 1/4" x 34"
	GD12797-02	-	Drop Hose, 3 1/4" x 30"
	GD12797-03	-	Drop Hose, 3 1/4" x 8"
2.	G10999	2	T-Bolt Hose Clamp, 3 1/4"
3.	GA9623	1	Lid W/Gasket, Snap Ring, View Port Support And View Cap
	GD13530	-	Gasket
	G11037	-	External Retaining Ring, 2 7/8" (If Applicable)
	GD13645	-	View Port Support (If Applicable)
	GD13412	-	View Cap
4.	G11033	2	Thumbscrew, 5/16"-18 x 1"
	GD12132	2	Seal
5.	GA9547	1	Mini-Hopper

BULK SEED HOPPER CATWALK

(TWL189d)

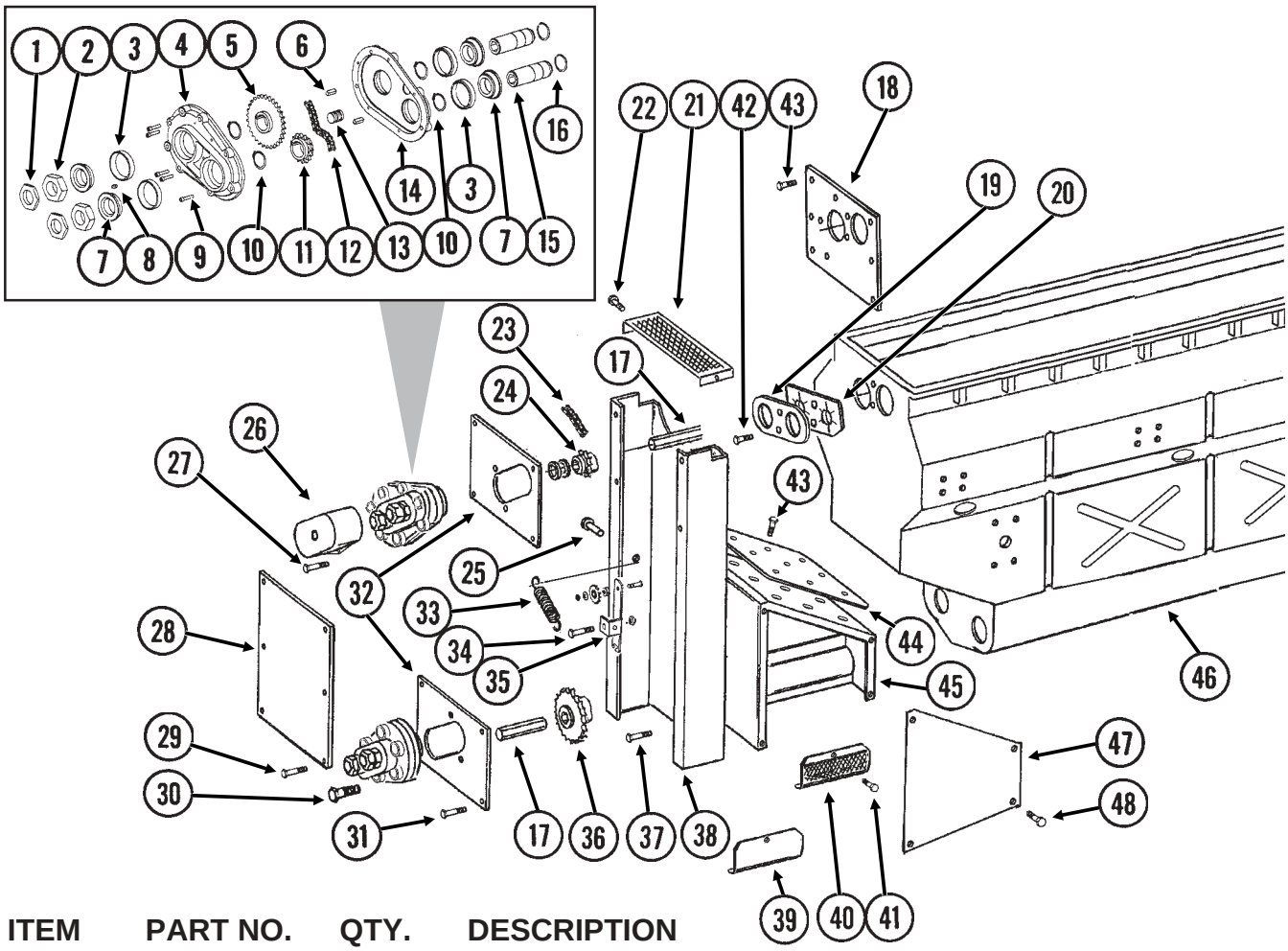


ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA9681	8-12	Support Step
2.	GD1113	20-24	U-Bolt, 5" x 7" x 5/8"-11
	G10230	40-48	Lock Washer, 5/8"
	G10104	40-48	Hex Nut, 5/8"-11
3.	GA6189	8-12	Hitch Pin
4.	GA9682	1	Catwalk, 53", R.H., 12 Row 30" And 16 Row 30"
	GA9683	1	Catwalk, 53", L.H., 12 Row 30" And 16 Row 30"
	GA9684	2	Catwalk, 96", Center, 12 Row 30"
	GA9685	4	Catwalk, 61", Center, 16 Row 30"
5.	GA9686	2	Support Step, 12 Row 30" Only
6.	GA9868	2	Step Support, 12 Row 30" Only
7.	GA9867	8-12	Step Support
8.	GD2721	20-24	U-Bolt. 2" x 2" x 1/2"-13
	G10206	40-48	Washer, 1/2" SAE
	G10111	40-48	Lock Nut, 1/2"-13
9.	GB0315	10-12	Step

BULK SEED HOPPER GEARBOX DRIVE

(TWL213b/TWL190g)

L.H. Side Of Planter - 12 Row Shown



ITEM	PART NO.	QTY. (Per Hopper)	DESCRIPTION
1.	GD13396	4	Jam Nut, 1 1/2"-12 (3/8" Thick)
2.	G10087	4	Hex Jam Nut, 1 1/2"-12, Grade 2
3.	GR0434	8	Cup
4.	GD13186	1	Outer Housing, L.H. (Shown)
	GD13533	1	Outer Housing, R.H.
5.	GD12698	2	Sprocket, 30 Tooth
6.	GD13226-01	4	Key, 5/16" Square x 1"
7.	GA0895	8	Bearing
8.	G10640	2	Grease Fitting, 1/4"-28
9.	G11022	10	Hex Socket Head Cap Screw, 1/4"-28 x 1 1/4"
10.	G10283	8	External Retaining Ring, 1 1/2"
11.	GD12696	2	Sprocket, 16 Tooth
12.	GA9574	2	Chain, No. 40
13.	GD13225	2	Chain Idler
14.	GD13185	1	Inner Housing, L.H. (Shown)
	GD13534	1	Inner Housing, R.H.
15.	GD13194	4	Hub
16.	GD11490	4	Round External Retaining Ring
17.		-	See “Bulk Seed Hopper Auger Assembly”, Pages P20 And P21
18.	GD14112	1	Plate, 13 1/2" x 12"
19.	GD14107	1	Shield, 4 1/2" x 8 7/16"
20.	GD14094	1	Rubber Gasket

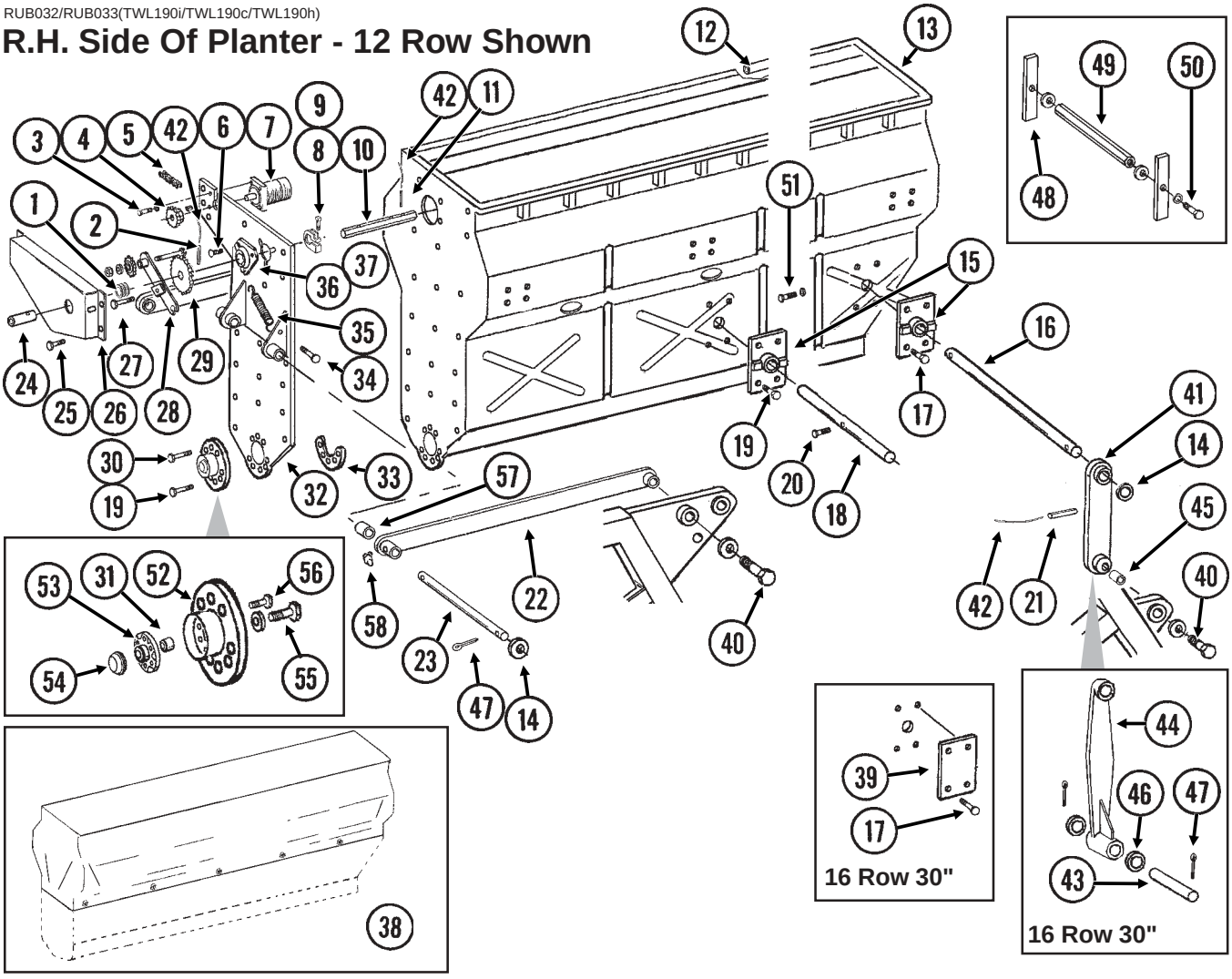
BULK SEED HOPPER GEARBOX DRIVE

ITEM	PART NO.	QTY. (Per Hopper)	DESCRIPTION
21.	GA9182	2	Mesh Cover
22.	G10001	4	Hex Head Cap Screw, 3/8"-16 x 1"
	G10210	4	Washer, 3/8" USS
23.	G3310-126	1	Chain, No. 40, 126 Pitch Including Connector Link
	GR0912	-	Connector Link, No. 40
24.	GA5106	1	Sprocket, 17 Tooth
25.	G10870	1	Clevis Pin, 3/8" x 1"
	G10860	1	Retaining Ring, 3/8"
26.	G11035	4	Hex Head Cap Screw, 1/4"-28 x 1/2"
	G10211	4	Washer, 1/4" SAE
27.	GD12791	2	Plastic Cover
28.	GD13128	1	Cover Plate
29.	G10001	6	Hex Head Cap Screw, 3/8"-16 x 1"
	G10210	6	Washer, 3/8" USS
30.	G10060	6	Hex Head Cap Screw, 5/16"-18 x 2 1/2"
	G10219	6	Washer, 5/16" USS
	G10109	6	Lock Nut, 5/16"-18
31.	G10002	8	Hex Head Cap Screw, 3/8"-16 x 3/4"
	G11017	4	Flange Nut, 3/8"-16
32.	GD13129	2	Cover Plate
33.	GD5857	1	Spring
34.	G10743	1	Hex Head Cap Screw, 5/8"-11 x 3 3/4"
	G10104	1	Hex Nut, 5/8"-11
	G10107	1	Lock Nut, 5/8"-11
35.	GA9624	1	Idler W/Sprocket And Hardware
	GA7154	-	Sprocket W/Bearing, 18 Tooth
	G10581	-	Hex Head Cap Screw, 1/2"-13 x 2 1/4"
	GD10356	-	Bushing, 3/4" Long
	G10128	-	Machine Bushing, 1/2", 14 Gauge
	G10501	-	Hex Jam Nut, 1/2"-13, Grade 2
36.	GA5202	1	Sprocket, 34 Tooth
37.	G10002	13	Hex Head Cap Screw, 3/8"-16 x 3/4"
	G10210	13	Washer, 3/8" USS
	G11017	13	Flange Nut, 3/8"-16
38.	GA9176	1	Auger Drive Housing
39.	GD13134	-	Lower Auger Cover
40.	GD13246	1	Lower Auger Screen
41.	G10001	1	Hex Head Cap Screw, 3/8"-16 x 1"
	G10210	1	Washer, 3/8" USS
42.	G10001	2	Hex Head Cap Screw, 3/8"-16 x 1"
	G11017	2	Flange Nut, 3/8"-16
43.	G10001	17	Hex Head Cap Screw, 3/8"-16 x 1"
	G10210	17	Washer, 3/8" USS
	G11017	17	Flange Nut, 3/8"-16
44.	GD14111	1	Plate, 13" x 11 1/2"
45.	GA9172	-	Auger Housing, R.H.
	GA9173	-	Auger Housing, L.H.
46.		-	See “Bulk Seed Hopper And Hydraulic Motor Drive”, Pages P14 And P15
47.	GD13149	2	Cover
48.	G10020	8	Hex Head Cap Screw, 1/4"-20 x 5/8"
	G10227	8	Lock Washer, 1/4"
A.	GA9603	2	Chain Case Assembly, L.H. (Items 1-16) (Shown)
	GA9602	2	Chain Case Assembly, R.H. (Items 1-16)

BULK SEED HOPPER AND HYDRAULIC MOTOR DRIVE

RUB032/RUB033(TWL190i/TWL190c/TWL190h)

R.H. Side Of Planter - 12 Row Shown



ITEM	PART NO.	QTY. (Per Hopper)	DESCRIPTION
1.	G10233	3	Machine Bushing, 1", 10 Gauge
2.	G10602	1	Spring Pin, 1/4" x 1 1/2"
3.	G10001	4	Hex Head Cap Screw, 3/8"-16 x 1"
	G10229	4	Lock Washer, 3/8"
4.	GA9625	1	Sprocket, 20 Tooth
5.	G3310-88	1	Chain, No. 40, 88 Pitch Including Connector Link
	GR0912	-	Connector Link, No. 40
6.	G10312	3	Carriage Bolt, 5/16"-18 x 3/4"
	G10923	3	Flange Nut, 5/16"-18, No Serration
7.	GA9395	1	Hydraulic Motor
	GR1558	-	Seal Kit (Eaton), Includes: (6) Seals, (1) BU Ring, (3) O-Rings, (7) Seal Washers
	GR1637	-	Seal Kit (TCI), Includes: (2) Seals, (1) Ring, (4) O-Rings
8.	GD11045	1	Lock Clamp
9.	G10130	1	Square Head Machine Bolt, 5/16"-18 x 1 3/4"
	G10923	1	Flange Nut, 5/16"-18, No Serration
10.	GD13460	1	Hex Shaft, 7/8" x 7 3/4" (2 Holes)
11.	G10606	2	Spring Pin, 1/4" x 2"
12.	GD13575-01	2	Tube, 1" O.D. x 144", 12 Row 30"
	GD13575-02	2	Tube, 1" O.D. x 216", 16 Row 30"
13.	GD13432	1	Inner Tank, R.H., 12 Row 30" And 16 Row 30"
	G1K356	1	Outer Tank Kit, R.H., 12 Row 30" And 16 Row 30"
	GD13433	1	Inner Tank, L.H., 12 Row 30" And 16 Row 30"
	G1K355	1	Outer Tank Kit, L.H., 12 Row 30" And 16 Row 30"
	GD13434	1	Center Tank, R.H. And L.H., 16 Row 30"
14.	G10979	4	Special Washer, 1 1/4"
15.		-	See “Bulk Seed Hopper Auger Manifold Assembly”, Pages P18 And P19
16.	GD13144	1	Pin, 1 1/4" x 20 1/2"

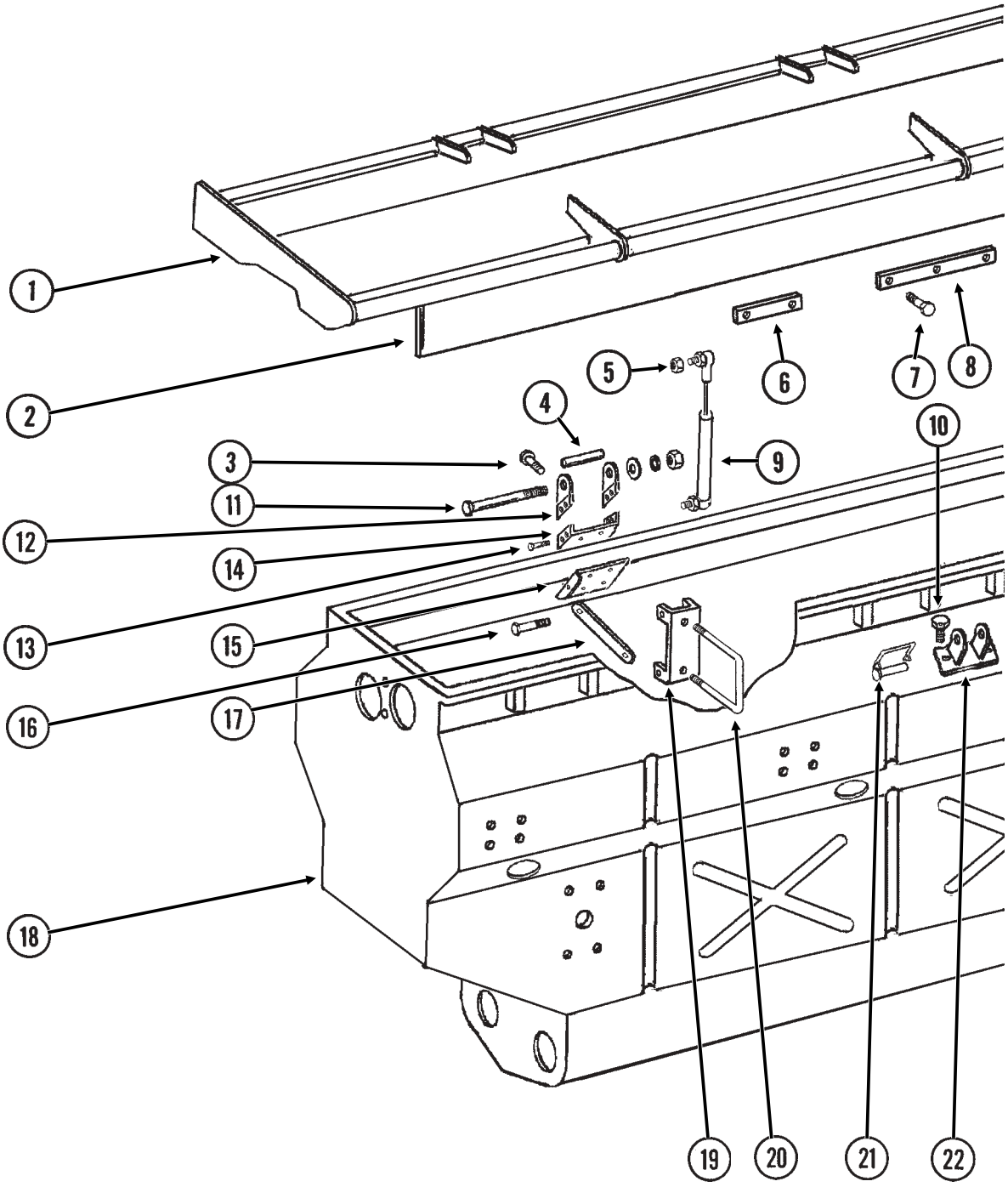
BULK SEED HOPPER AND HYDRAULIC MOTOR DRIVE

ITEM	PART NO.	QTY. (Per Hopper)	DESCRIPTION
17.	G10004	8-16	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
	G11017	8-16	Flange Nut, 3/8"-16
18.	GD13142	1	Pin, 1 1/4" x 20"
19.	G10003	8	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G11017	8	Flange Nut, 3/8"-16
20.	G10049	1	Hex Head Cap Screw, 3/8"-16 x 2 1/2"
	G10108	1	Lock Nut, 3/8"-16
21.	G10600	2	Spring Pin, 5/16" x 2 1/2"
22.	GA9160	2	Link, 52"
23.	GD13143	1	Pin, 1 1/4" x 26"
24.	GD13554	1	Coupler, 3 1/4"
25.	G10001	6	Hex Head Cap Screw, 3/8"-16 x 1"
	G10210	6	Washer, 3/8" USS
	G11017	6	Flange Nut, 3/8"-16
26.	GD13122	1	Cover, R.H.
	GD13123	-	Cover, L.H.
27.	G10036	1	Hex Head Cap Screw, 5/8"-11 x 4"
	G10104	1	Hex Nut, 5/8"-11
	G10107	1	Lock Nut, 5/8"-11
28.	GA9554	1	Idler W/Sprocket And Hardware
	GA7154	-	Sprocket W/Bearing, 18 Tooth
	G10017	-	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10128	-	Machine Bushing, 1/2", 14 Gauge
	G10501	-	Hex Jam Nut, 1/2"-13, Grade 2
29.	GA7180	1	Sprocket, 40 Tooth
30.	G10001	23	Hex Head Cap Screw, 3/8"-16 x 1"
	G10210	10	Washer, 3/8" USS
	G11017	23	Flange Nut, 3/8"-16
31.	GA2014	1	Bearing
32.	GA9157	1	Tank Mount, L.H.
	GA9158	-	Tank Mount, R.H.
33.	GD13555	3	Tie Plate
34.	G10870	1	Clevis Pin, 3/8" x 1"
	G10860	1	Retaining Ring, 3/8"
35.	GD5857	1	Spring
36.	G3400-01	1	Flangette
37.	G2100-03	2	Bearing, 7/8" Hex Bore, Spherical
38.	G1K338	1	Hopper Cover Kit, 12 Row 30", Includes: (1) L.H. Bulk Seed Hopper Cover, (1) R.H. Bulk Seed Hopper Cover
	G1K339	1	Hopper Cover Kit, 16 Row 30", Includes: (1) L.H. Bulk Seed Hopper Cover, (1) R.H. Bulk Seed Hopper Cover
39.	GD13147	-	Plate, 4" x 6"
40.	G10417	4	Hex Head Cap Screw, 7/8"-9 x 4 1/2"
	G10659	4	Washer, 7/8" USS
41.	GA9162	2	Link, 13", 12 Row 30"
42.	GD13524-01	-	Lock Wire, 10", Stainless Steel
43.	GD13597	2	Pin, 1 1/4" x 8 5/8"
44.	GB0308	2	Link, 18", 16 Row 30"
45.	GD2734-13	2	Sleeve, 1 1/4" O.D. x 3 1/8" Long
46.	G10159	4	Machine Bushing, 1 1/4", 10 Gauge
47.	G10460	4	Cotter Pin, 1/4" x 2"
48.	GD14056	4	Bar, 1" x 8"
49.	GD14057	2	Hex Shaft, 7/8" x 12"
50.	G10016	4	Hex Head Cap Screw, 1/2"-13 x 2"
	G10228	4	Lock Washer, 1/2"
	G10216	4	Washer, 1/2" USS
51.	G10001	4	Hex Head Cap Screw, 3/8"-16 x 1"
	G10101	4	Hex Nut, 3/8"-16
52.	GA9848	1	End Cap
53.	GD10473	1	Bearing Housing
54.	GD11845	1	Dust Cap
55.	G10007	1	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
	G10205	1	Washer, 5/8" SAE
	G10107	1	Lock Nut, 5/8"-11
56.	G10020	6	Hex Head Cap Screw, 1/4"-20 x 5/8"
	G10110	6	Lock Nut, 1/4"-20
57.	GD0752-41	2	Sleeve, 1"
58.	G10779	2	Grease Fitting, 90°, 1/4"-28
A.	GA9859	-	Bearing Cap Assembly (Items 31 And 52-56)

BULK SEED HOPPER LID

(TWL190j)

L.H. Side Of Planter - 12 Row Shown



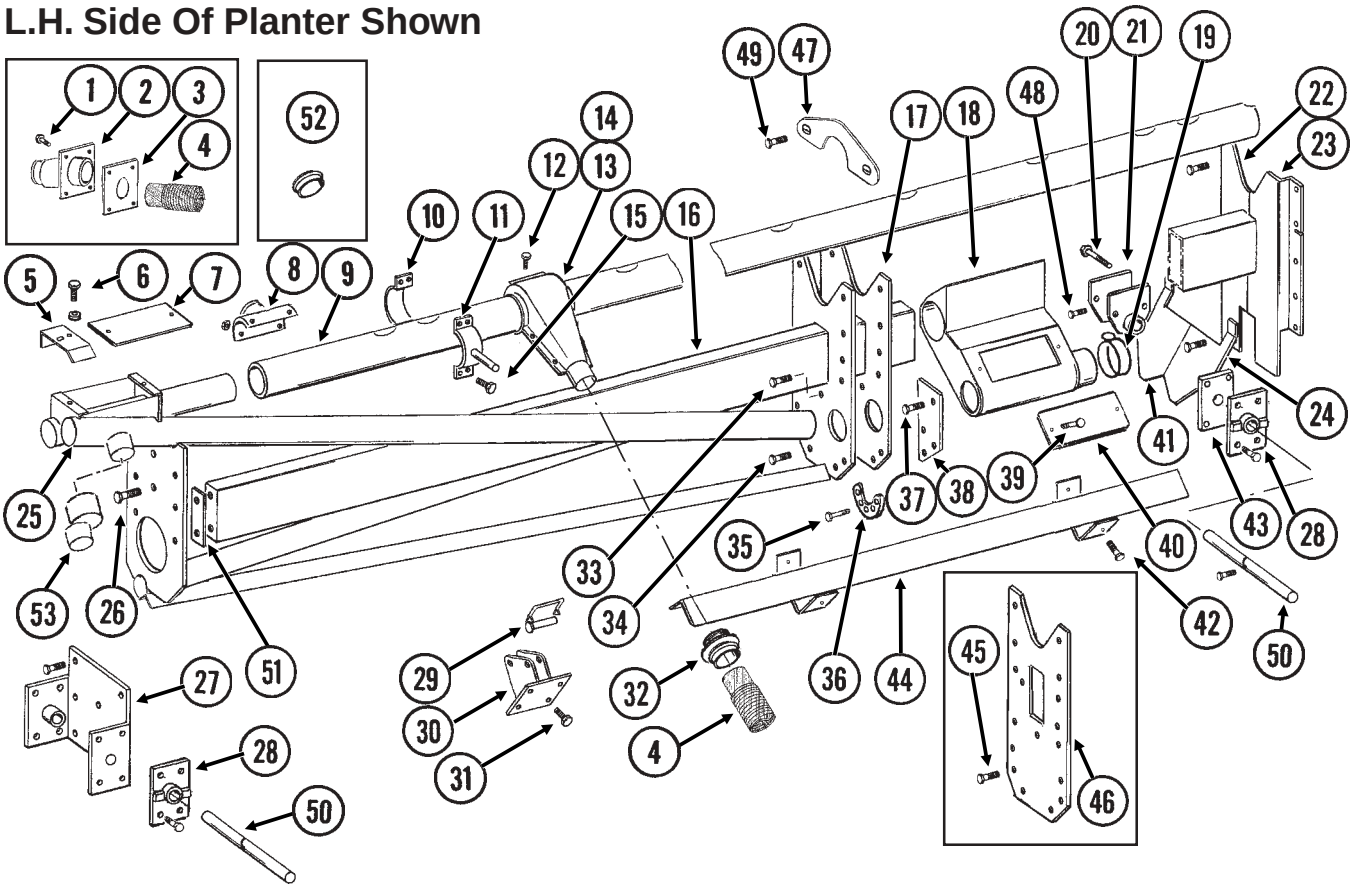
BULK SEED HOPPER LID

ITEM	PART NO.	QTY. (Per Hopper)	DESCRIPTION
1.	GA9890	1	Tank Lid, R.H., 12 Row 30"
	GA9891	1	Tank Lid, L.H., 12 Row 30"
	GA9892	-	Tank Lid, R.H., 16 Row 30"
	GA9893	-	Tank Lid, L.H., 16 Row 30"
2.	GD13217	1	Splash Guard Strip, 12 Row 30"
	GD13218	-	Splash Guard Strip, 16 Row 30"
3.	G10001	8	Hex Head Cap Screw, 3/8"-16 x 1"
	G11017	8	Flange Nut, 3/8"-16
4.	GD7904-05	-	Sleeve, 5 3/8" Long
5.	G10109	4	Lock Nut, 5/16"-18
6.	GD13470	7-	Retainer,1" x 3"
7.	G10312	20	Carriage Bolt, 5/16"-18 x 3/4"
	G10303	4	Carriage Bolt, 5/16"-18 x 1"
	G10109	24	Lock Nut, 5/16"-18
8.	GD12847	2-	Retainer, 1" x 18"
9.	GA9404	2	Gas Spring, 134 Pounds
10.	G10305	2	Carriage Bolt, 3/8"-16 x 1"
	G11017	2	Flange Nut, 3/8"-16
11.	G10829	3-4	Hex Head Cap Screw, 1/2"-13 x 6 1/2"
	G10216	6-8	Washer, 1/2" USS
	G10111	3-4	Lock Nut, 1/2"-13
12.	GD13595	6-8	Hinge Tab
13.	G10043	12-16	Hex Head Cap Screw, 5/16"-18 x 3/4"
	G10219	24-32	Washer, 5/16" USS
	G10109	12-16	Lock Nut, 5/16"-18
14.	GD13190	3-4	Hinge Plate
15.	GD13151	-	Bracket
16.	G10019	4	Hex Head Cap Screw, 5/16"-18 x 1"
	G10219	4	Washer, 5/16" USS
	G10923	4	Flange Nut, 5/16"-18, No Serration
17.	GD13152	-	Brace
18.		-	See “Bulk Seed Hopper And Hydraulic Motor Drive” , Pages P14 And P15
19.	GD13198	2	Spring Anchor
20.	GD13491	2	U-Bolt, 2" x 6" x 3/8"-16
	G10901	4	Lock Nut, 3/8"-16
21.	GD10705	1	Locking Clip Pin, 1/4" x 2 1/2"
22.	GA9588	1	Latch

BULK SEED HOPPER AUGER MANIFOLD ASSEMBLY

RUB034(TWL192c)

L.H. Side Of Planter Shown



ITEM	PART NO.	QTY. (Per Hopper)	DESCRIPTION
1.	G10019	4	Hex Head Cap Screw, 5/16"-18 x 1"
	G10923	4	Flange Nut, 5/16"-18, No Serration
2.	GA9199	1	Drop Tube (Even-Row Push Row Unit Only)
3.	GD13790	1	Backing Plate (Even-Row Push Row Unit)
4.		-	See “Mini-Hopper And Drop Hoses”, Page P10
5.	GD13163	1	Shield
6.	G10020	2	Hex Head Cap Screw, 1/4"-20 x 5/8"
	G10227	1	Lock Washer, 1/4"
	G10209	2	Washer, 1/4" USS
7.	GD13136	1	Cover
8.	GA9589	1	Cover Plate
9.	GD13205	1	Distribution Manifold, 126", L.H., 12 Row 30"
	GD13206	-	Distribution Manifold, 126", R.H., 12 Row 30"
	GD13207	-	Distribution Manifold, 197", L.H., 16 Row 30"
	GD13208	-	Distribution Manifold, 197", R.H., 16 Row 30"
10.	GD13183	1	Clamp
11.	GA9159	1	Handle
12.	G11020	1	Phillips Pan Head Machine Screw, No. 10-24
13.	GD11968	-	Funnel, Top
14.	GA9621	-	Funnel, Bottom
15.	G10043	4	Hex Head Cap Screw, 5/16"-18 x 3/4"
	G10109	4	Lock Nut, 5/16"-18
16.	GA9174	1	Support Tube, 133 3/4", 12 Row 30"
	GA9181	-	Support Tube, 204 1/4", 16 Row 30"
17.	GD13211	-	Tie Plate

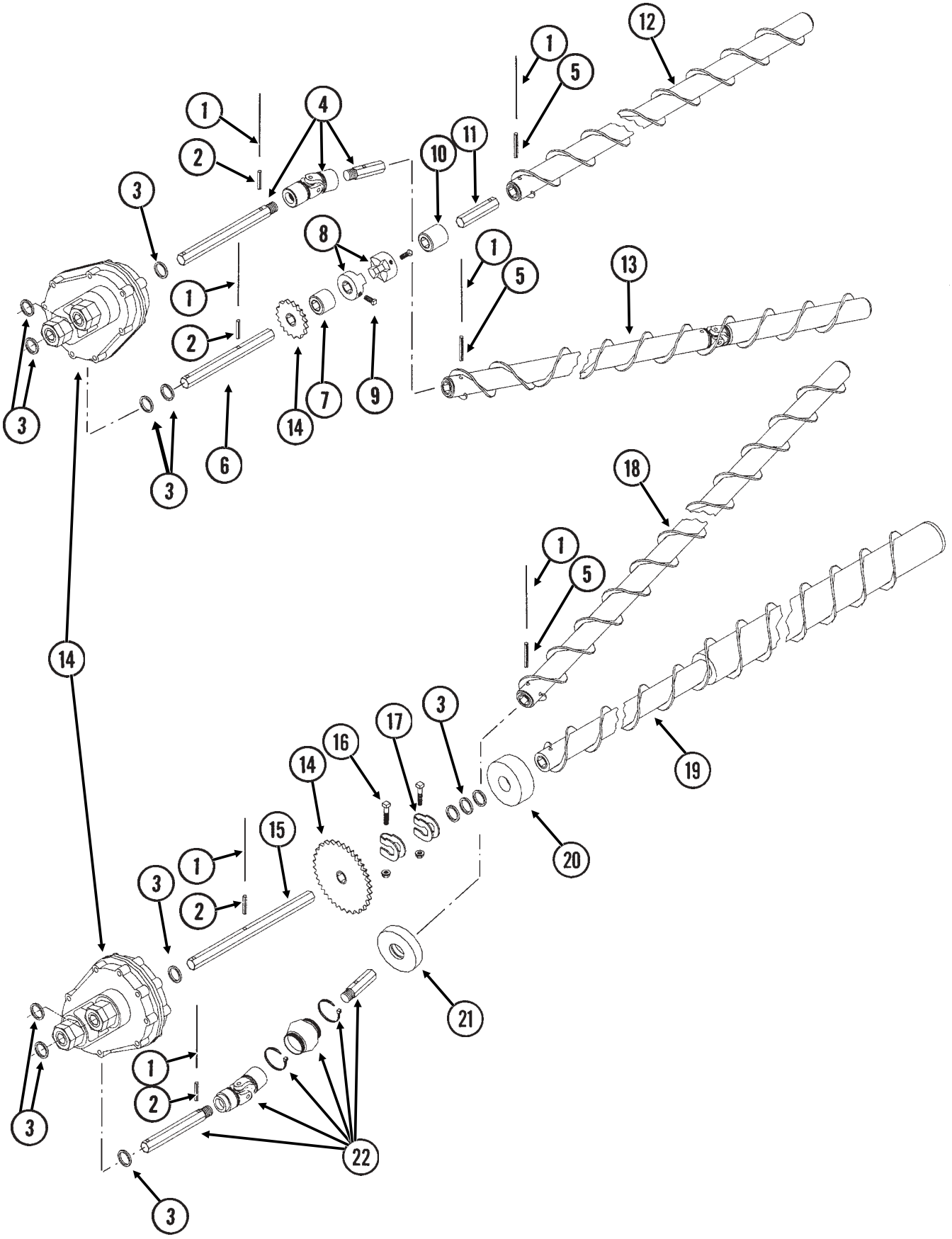
BULK SEED HOPPER AUGER MANIFOLD ASSEMBLY

ITEM	PART NO.	QTY. (Per Hopper)	DESCRIPTION
18.	GD13351	1	Transfer Housing, L.H. (Shown)
	GD13382	-	Transfer Housing, R.H.
19.	G11036	1	Hose Clamp, Style 4
20.	G10033	2	Hex Head Cap Screw, 1/2"-13 x 3 1/2"
	G10216	2	Washer, 1/2" USS
	G10111	2	Lock Nut, 1/2"-13
21.	GA9175	2	Support
22.	GD13126	1	Baffle, R.H.
23.	GD13127	1	Baffle, L.H.
24.	GD13125	-	Baffle, L.H.
25.	GA9170	1	Auger Housing Assembly, R.H.
	GA9171	-	Auger Housing Assembly, L.H.
26.	G10007	2	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
	G10217	2	Washer, 5/8" USS
	G10230	2	Lock Washer, 5/8"
27.	GD13148	1	Auger Mount Plate
28.	GB0307	-	Plate
29.	GD10705	2	Locking Clip Pin, 1/4" x 2 1/2"
30.	GA9196	2	Latch
31.	G10001	8	Hex Head Cap Screw, 3/8"-16 x 1" -
	G10210	8	Washer, 3/8" USS
	G11017	8	Flange Nut, 3/8"-16
32.	GB0312	12-16	Nipple
	GB0313	12-16	Nut, 3 1/4"-12
33.	G10003	2	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G10210	2	Washer, 3/8" USS
34.	G10003	12	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G11017	12	Flange Nut, 3/8"-16
35.	G10003	5-10	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G10108	5-10	Lock Nut, 3/8"-16
36.	GD13555	2-4	Tie Plate
37.	G10003	16	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G11017	16	Flange Nut, 3/8"-16
38.	GD13120	4	Tie Bar
39.	G10018	2	Hex Head Cap Screw, 5/16"-18 x 5/8"
	G10232	2	Lock Washer, 5/16"
40.	GD13464	2	Cover
41.	GD13124	-	Baffle Plate, R.H.
42.	G10001	4	Hex Head Cap Screw, 3/8"-16 x 1"
	G10210	4	Washer, 3/8" USS
	G11017	4	Flange Nut, 3/8"-16
43.	GD13227	2	Plate, 4" x 6"
44.	GD13138	1-2	Tunnel Cover
45.	G10003	15	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G11017	15	Flange Nut, 3/8"-16
46.	GD13571	2	Tie Plate, 16 Row 30"
47.	GD14058	1-2	Bracket
48.	G10049	1	Hex Head Cap Screw, 3/8"-16 x 2 1/2"
	G10108	1	Lock Nut, 3/8"-16
49.	G10003	2	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	G11017	2	Flange Nut, 3/8"-16
50.		-	See “Bulk Seed Hopper And Hydraulic Motor Drive”, Pages P14 And P15
51.	GD13576	-	Shim, 10 Gauge x 1 3/8" x 5 3/8"
	GD13577	-	Shim, 1/4" x 1 3/8" x 5 3/8"
52.	G11000	-	Cap, 3"
53.	GA9667	1	Spout Extension

BULK SEED HOPPER AUGER ASSEMBLY

(TWL228)

L.H. Side Of Planter Shown

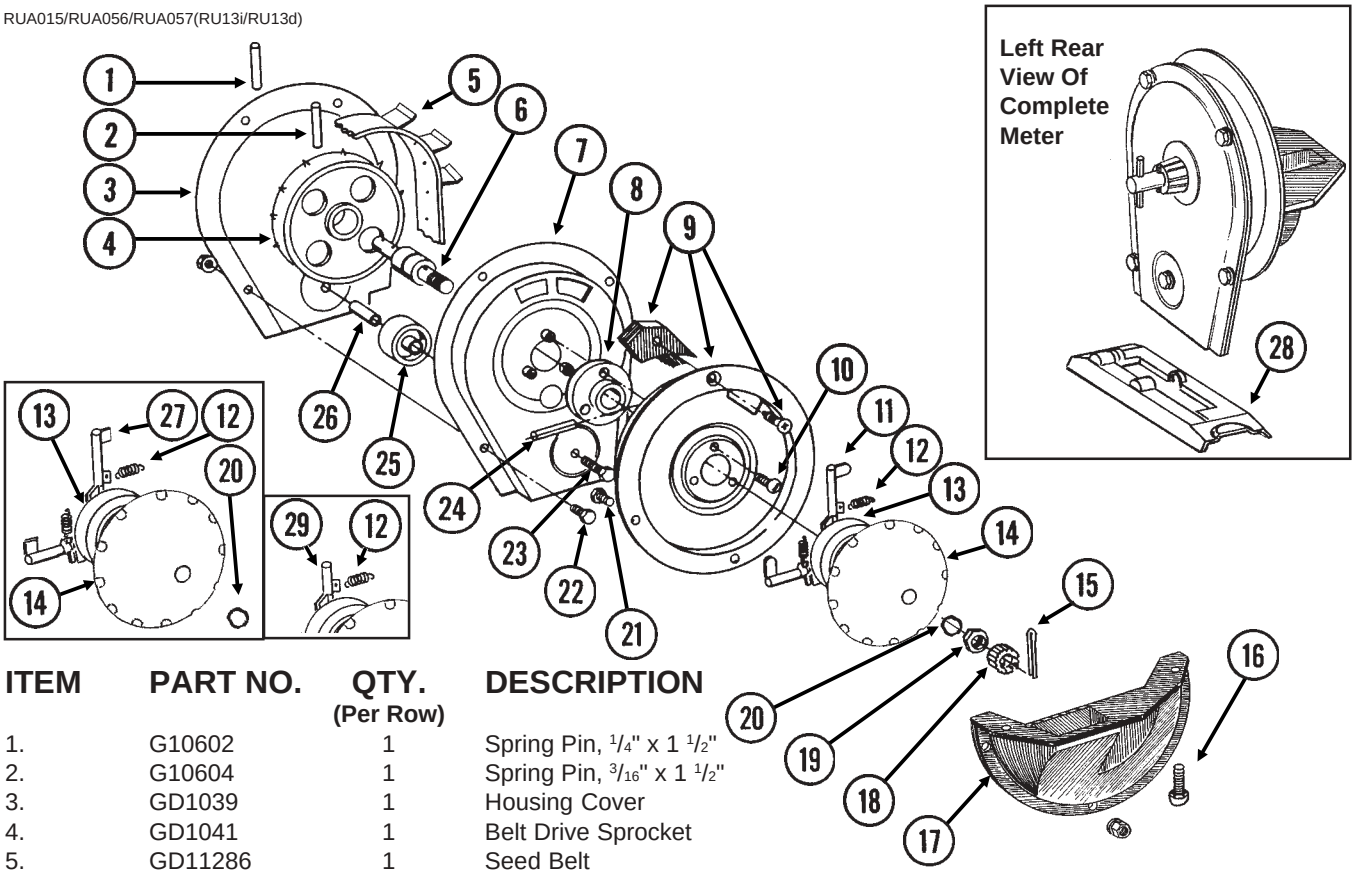


BULK SEED HOPPER AUGER ASSEMBLY

ITEM	PART NO.	QTY. (Per Hopper)	DESCRIPTION
1.	GD13524-01	11	Lock Wire, 10", Stainless Steel
2.	G10602	8	Spring Pin, 1/4" x 1 1/2"
3.	G10233	12	Machine Bushing, 1", 10 Gauge
4.	GA9823	1	Shaft Assembly W/U-Joint, 15 3/16", L.H.
	GA9824	-	Shaft Assembly W/U-Joint, 15 3/16", R.H.
	GA9169	-	U-Joint, L.H. Threads
	GA9168	-	U-Joint, R.H. Threads
5.	G10606	3	Spring Pin, 1/4" x 2"
6.	GD13204	1	Shaft, 7/8" x 8 5/8" (2 Holes)
7.	GD3660-17	1	Sleeve, 1 1/8"
8.	GB0287	2	Coupler
9.	G10131	2	Square Head Set Screw, 5/16"-18 x 3/4"
10.	GD3660-16	1	Sleeve, 1 1/2"
11.	GD13203	1	Shaft, 7/8" x 3 1/2" (1 Hole)
12.	GA9191	1	Top Auger, L.H., 147 1/2", 12 Row 30"
	GA9192	-	Top Auger, R.H., 147 1/2", 12 Row 30"
	GA9193	-	Top Auger, L.H., 217 1/2", 16 Row 30"
	GA9194	-	Top Auger, R.H., 217 1/2", 16 Row 30"
13.	GA9189	1	Upper Lift Auger Assembly W/U-Joint And Hardware, 91 5/8", L.H.
	GA9190	-	Upper Lift Auger Assembly W/U-Joint And Hardware, 91 5/8", R.H.
	GA9177	-	U-Joint
	G10606	-	Spring Pin, 1/4" x 2"
14.		-	See “Bulk Seed Hopper Gearbox Drive”, Pages P12 And P13
15.	GD14067	1	Shaft, 7/8" x 12" (2 Holes)
16.	G10130	2	Square Head Machine Bolt, 5/16"-18 x 1 3/4"
	G10923	2	Flange Nut, 5/16"-18, No Serration
17.	GD11045	2	Lock Clamp
18.	GA9183	1	Lower Lift Auger, 83 1/2", L.H.
	GA9184	-	Lower Lift Auger, 83 1/2", R.H.
19.	GA9387	1	Floor Auger, L.H., 150 1/4", 12 Row 30"
	GA9388	-	Floor Auger, R.H., 150 1/4", 12 Row 30"
	GA9389	-	Floor Auger, L.H., 220 3/4", 16 Row 30"
	GA9390	-	Floor Auger, R.H., 220 3/4", 16 Row 30"
20.	GD14108	1	Plug W/Stepped Hole, 1 1/4" x 3 1/2"
21.	GD13168	1	Plug W/Stepped Hole, 3/4" x 3 1/2"
22.	GA9825	1	Shaft Assembly W/U-Joint, Boot And Tie Cables, 12 1/2", L.H.
	GA9826	-	Shaft Assembly W/U-Joint, Boot And Tie Cables, 12 1/2", R.H.
	GA9179	-	U-Joint, L.H. Threads (Stepped End)
	GA9180	-	U-Joint, R.H. Threads (Stepped End)
	GD13542	-	Boot
	GD1512	-	Tie Strap, 7 1/2"

FINGER PICKUP SEED METER

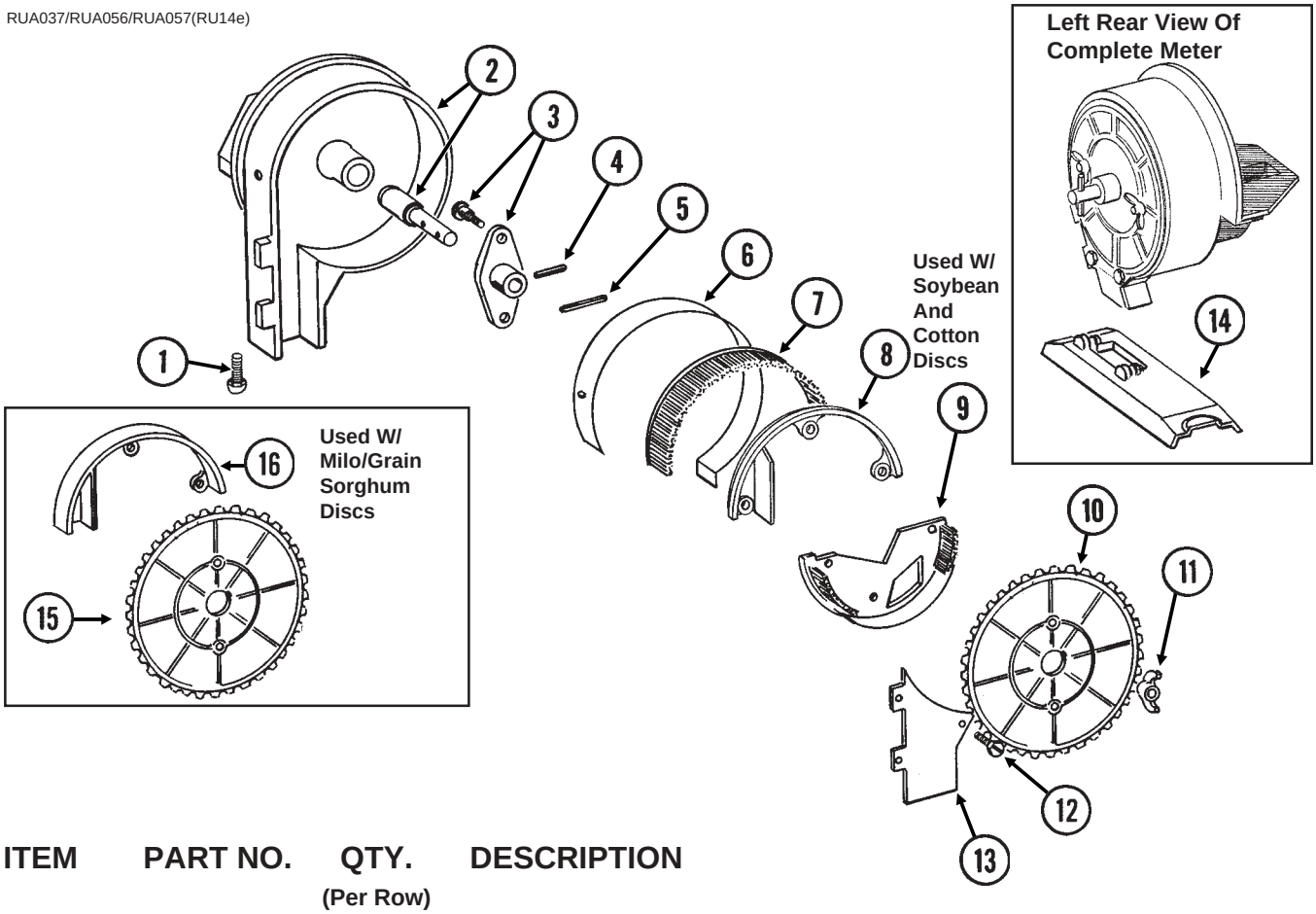
RUA015/RUA056/RUA057(RU13i/RU13d)



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10602	1	Spring Pin, 1/4" x 1 1/2"
2.	G10604	1	Spring Pin, 3/16" x 1 1/2"
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.	GR0664	1	Carrier Plate W/Brush And Screw
	GA2020	-	Brush
	G10690	-	Rolling Thread Screw, No. 10 x 3/4"
10.	G10401	3	Slotted Hex Washer Head Screw, No. 10-32 x 5/8"
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 3/4"
17.	GD11311	1	Seed Baffle
18.	GD1083	1	Cover Nut
19.	G10500	1	Jam Nut, 5/8"-18 UNF
20.	GA8343	1	Wave Washer, 5/8" (Triple Wave)
21.	G10020	3	Hex Head Cap Screw, 1/4"-20 x 5/8"
	G10323	3	Hex Flange Nut, 1/4"-20
22.	G10022	4	Hex Head Cap Screw, 1/4"-20 x 1/2"
	G10621	4	Flange Nut, 1/4"-20
23.	G10021	1	Hex Head Cap Screw, 1/4"-20 x 1 1/2"
	G10621	1	Flange Nut, 1/4"-20
24.	G10603	1	Spring Pin, 1/4" x 1 1/4"
25.	GD1042	1	Idler
26.	GB0120	1	Bushing, 17/64" I.D. x 1 1/32" Long
27.	GD10226	12	Finger, Oil Sunflower
28.	GD11373	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

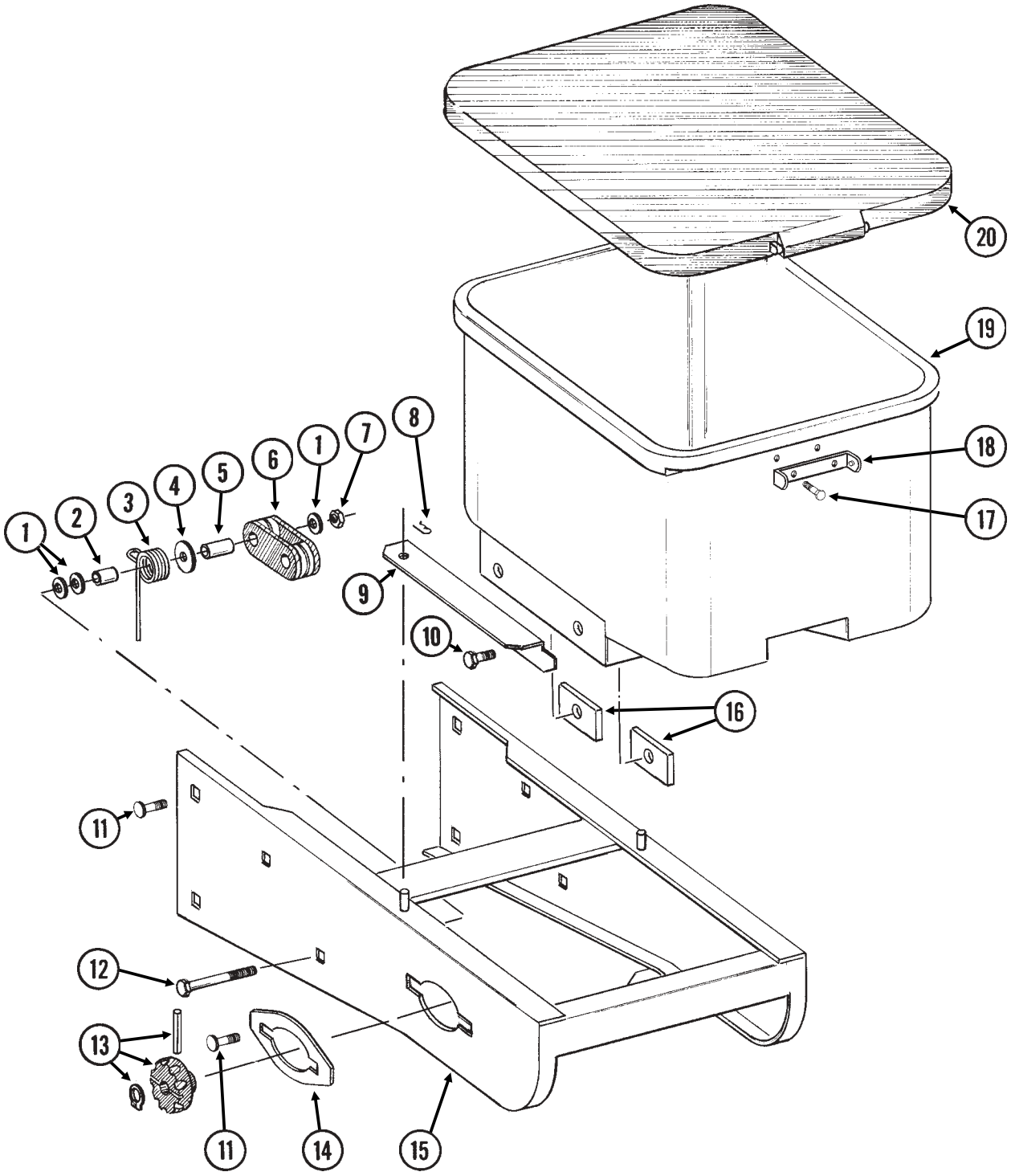
RUA037/RUA056/RUA057(RU14e)



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	Nylon Insert Wing Nut, 1/4"-20
12.	G10584	9	Slotted Tap 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.	GD11374	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)

GRANULAR CHEMICAL HOPPER AND HOPPER PANEL EXTENSION

RUA052/RUA053/RUB028(RU92k)

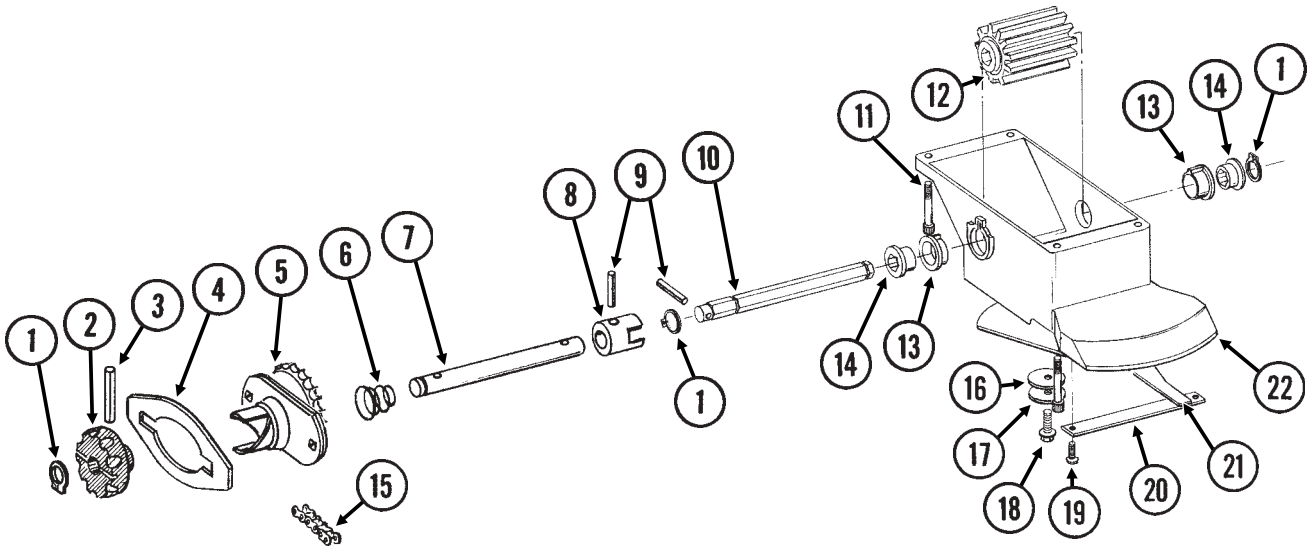


GRANULAR CHEMICAL HOPPER AND HOPPER PANEL EXTENSION

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10210	3	Washer, 3/8" USS
2.	GD2971-10	1	Sleeve, 9/16" Long
3.	GD11219	1	Spring
4.	G10201	1	Special Washer, 3/8" x 1 1/2" O.D.
5.	GD1026	1	Sleeve, 1 3/16" Long
6.	GD11962	1	Idler
7.	G10108	1	Lock Nut, 3/8"-16
8.	G10670	2	Hair Pin Clip, No. 3
9.	GD1059L	1	Support, L.H. (Shown)
	GD1059R	1	Support, R.H.
10.	G10002	4	Hex Head Cap Screw, 3/8"-16 x 3/4"
	G10229	4	Lock Washer, 3/8"
11.	G10312	8	Carriage Bolt, 5/16"-18 x 3/4"
	G10620	8	Flange Nut, 5/16"-18
12.	G10325	1	Hex Head Cap Screw, 3/8"-16 x 2 3/4"
13.		-	See “Granular Chemical Meter And Meter Drive”, Page P26
14.	GD11305	1	Plate
15.	A8422	1	Hopper Panel Extension **(Non-Stock Item)** **(Sub Wholegoods Order Code 700-01080)**
16.	GD11424	4	Block
17.	G10023	2	Hex Head Cap Screw, 1/4"-20 x 3/4"
	G10621	2	Flange Nut, 1/4"-20
18.	GD1060	1	Hinge
19.	GA8371	1	Hopper
20.	GA4444	1	Lid

GRANULAR CHEMICAL METER AND METER DRIVE

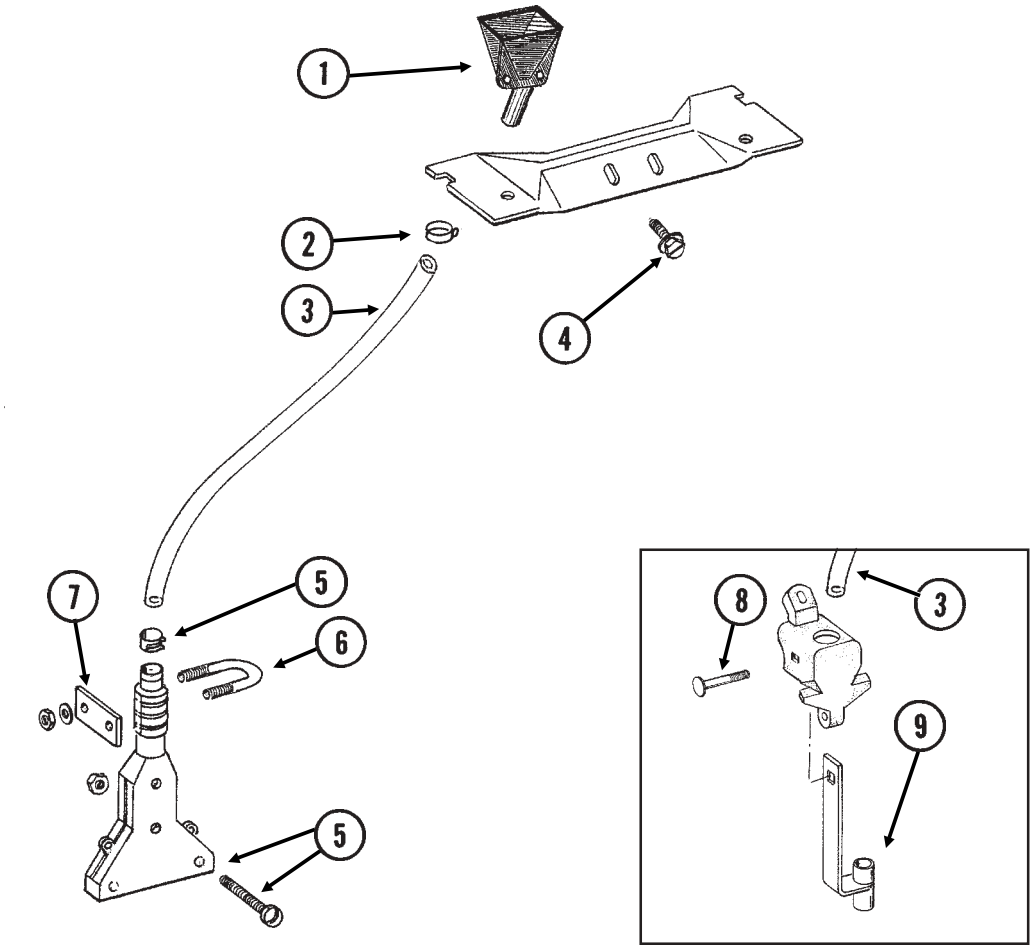
RUA051/RUB028(RU91a)



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10567	3	External Retaining Ring, 5/8"
2.	GD11239	1	Knob
3.	G10602	1	Spring Pin, 1/4" x 1 1/2"
4.		-	See “Granular Chemical Hopper And Hopper Panel Extension”, Pages P24 And P25
5.	GA8364	1	Sprocket And Bearing, Drive Clutch, 24 Tooth
6.	GD11413	1	Spring
7.	GD11240	1	Shaft
8.	GB0278	1	Coupler
9.	G10546	2	Spring Pin, 3/16" x 1 1/4"
10.	GD11297	1	Shaft
11.	G10921	4	Hex Socket Head Cap Screw, No. 10-24 x 7/8"
	G10257	4	Lock Washer, No. 10
12.	GD7148	1	Feed Roller, Hex Bore
13.	GB0115	2	Bearing
14.	GD7258	2	Hex Bushing
15.	G3303-114	1	Chain, No. 41, 114 Pitch Including Connector Link
	GR0196	1	Connector Link, No. 41
16.	G10660	1	Wave Washer, 1/2"
17.	G10209	1	Washer, 1/4" USS
18.	G10570	1	Slotted Hex Self-Tapping Screw, 1/4"-20 x 3/4"
19.	G10521	2	Slotted Pan Head Self-Tapping Screw, No. 10 x 3/8"
20.	GD1061	1	Support Strap
21.	GD1063	1	Metering Gate
22.	GB0116	1	Granular Housing
A.	GA8326	-	Granular Chemical Meter Complete (Items 1, 9, 10, 12-14 And 16-22)

GRANULAR CHEMICAL BANDING OPTIONS

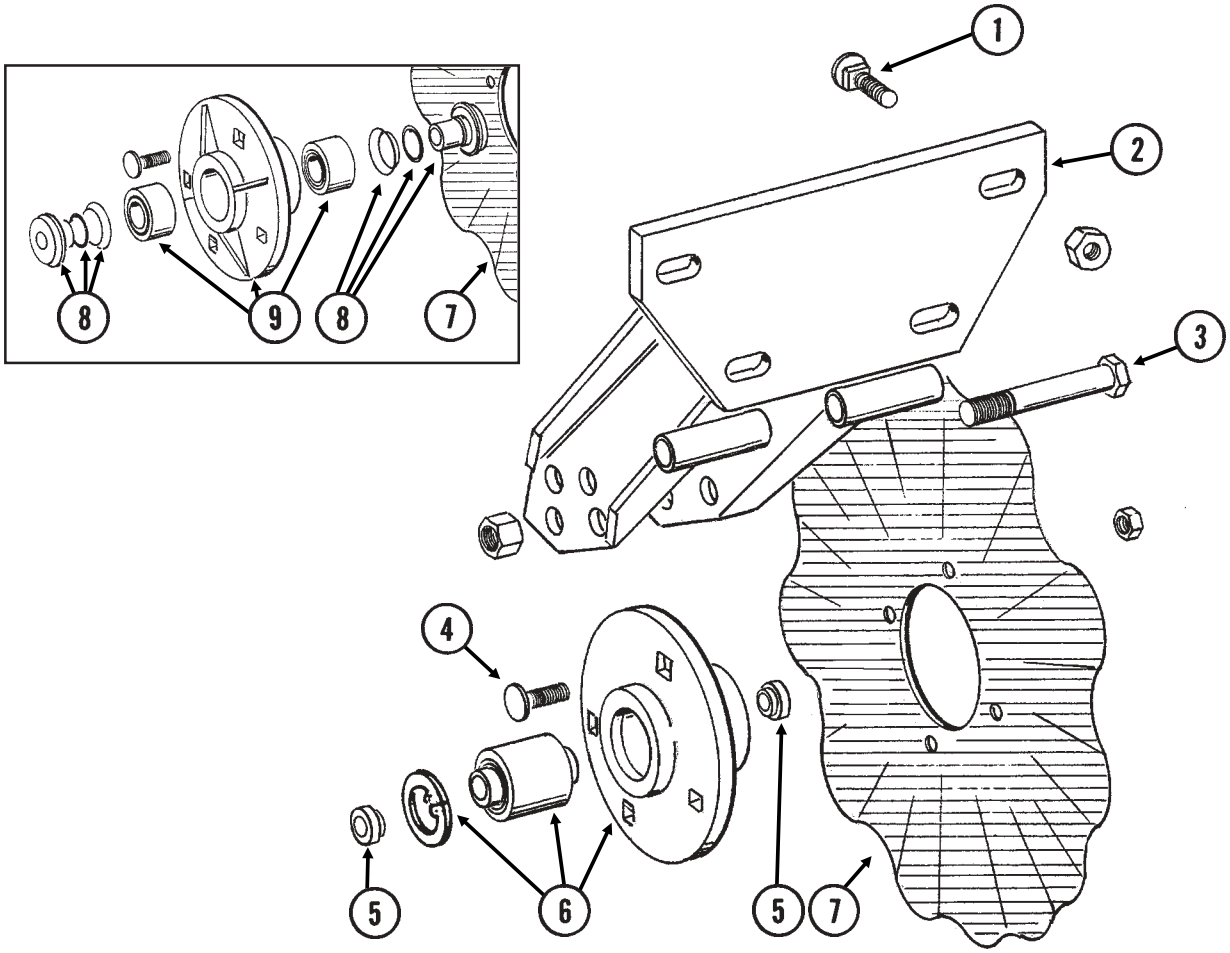
RUA061/RUA073(RU101n)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD2423	1	Funnel
2.	G10673	1	Hose Clamp, No. 8
3.	GD2947	1	Hose, 7/16" x 28"
4.	G10523	2	Slotted Pan Head Self-Tapping Screw, No. 10 x 1/2"
5.	GA6907	1	Slope-Compensating Bander W/Hardware (4 1/2" Band Width)
	G10864	1	Uni-Clamp
	G10757	2	Pan Head Screw, No. 10-32 x 1 1/4"
	G10758	2	Hex Nut, No. 10-32
6.	GD10963	1	U-Bolt, 1 1/2" x 1 5/16" x 1/4"-20
	G10209	2	Washer, 1/4" USS
	G10110	2	Lock Nut, 1/4"-20
7.	GD10984	1	Spacer
8.	G10315	1	Carriage Bolt, 1/2"-13 x 2 1/2" (Replaces Existing 1/2" x 2 1/4" Hardware)
9.	GA6741	1	Bracket (Straight Drop In-Furrow)

ROW UNIT MOUNTED NO TILL COULTER

RUA061(RU102/RU102c)

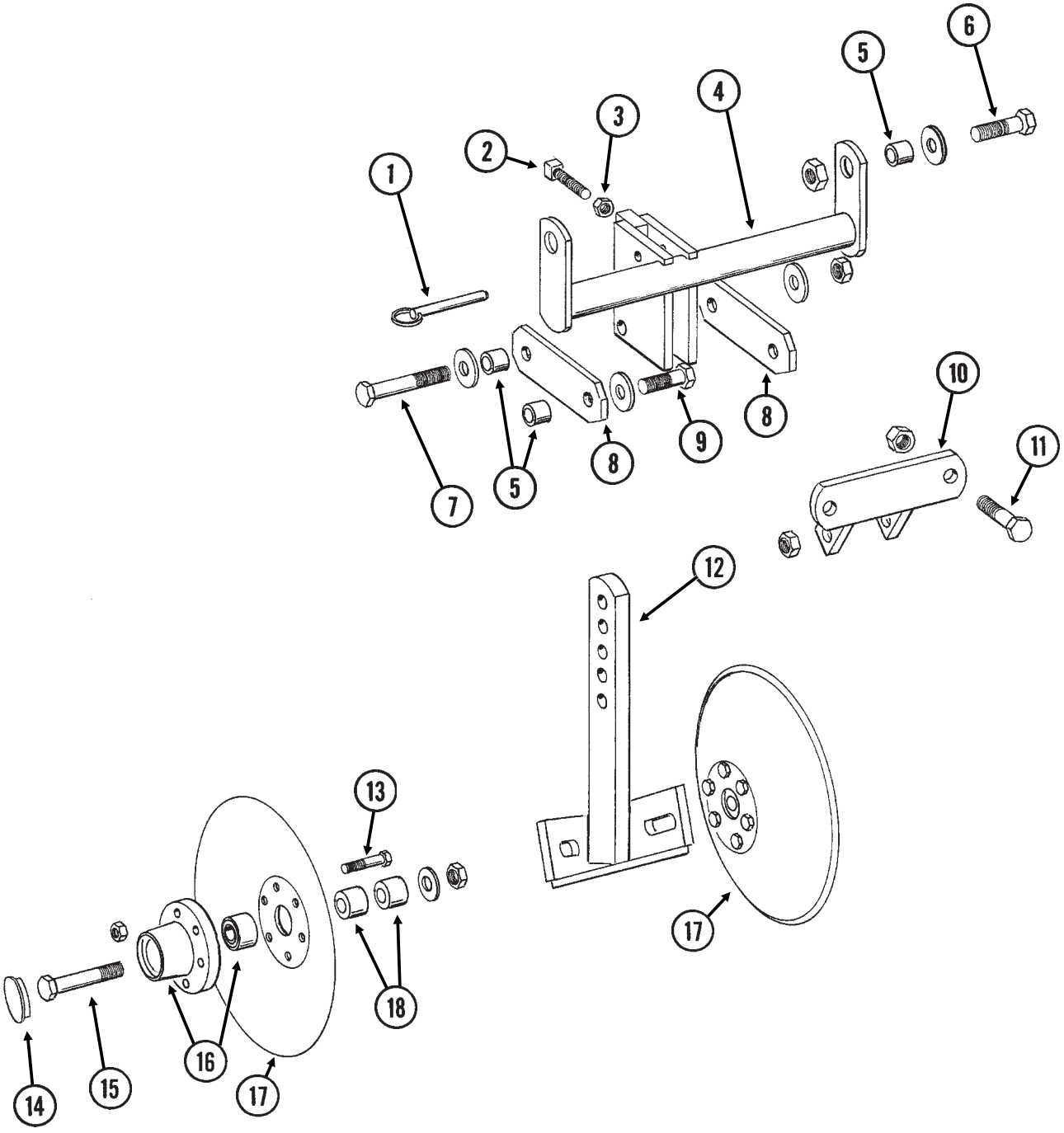


ROW UNIT MOUNTED NO TILL COULTER

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10574	4	Carriage Bolt, 1/2"-13 x 1 1/4"
	G10111	4	Lock Nut, 1/2"-13
2.	GA5625	1	Arm
3.	G10036	1	Hex Head Cap Screw, 5/8"-11 x 4"
	G10107	1	Lock Nut, 5/8"-11
4.	G10574	4	Carriage Bolt, 1/2"-13 x 1 1/4"
	G10111	4	Lock Nut, 1/2"-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, 3/4", 13 Flutes
8.	GB0227	2	Adapter W/O-Ring And Spring Washer
	GD8844	2	O-Ring
	GD8843	2	Spring Washer
9.	GA5640	1	Hub W/Bearings And Grease Fitting **(Sub G1K289)**
	GA5622	-	Bearing (2 Used Per Hub)
	G10640	-	Grease Fitting, 1/4"-28

ROW UNIT MOUNTED DISC FURROWER

RUA059/RUA058(RU99/RU98g)

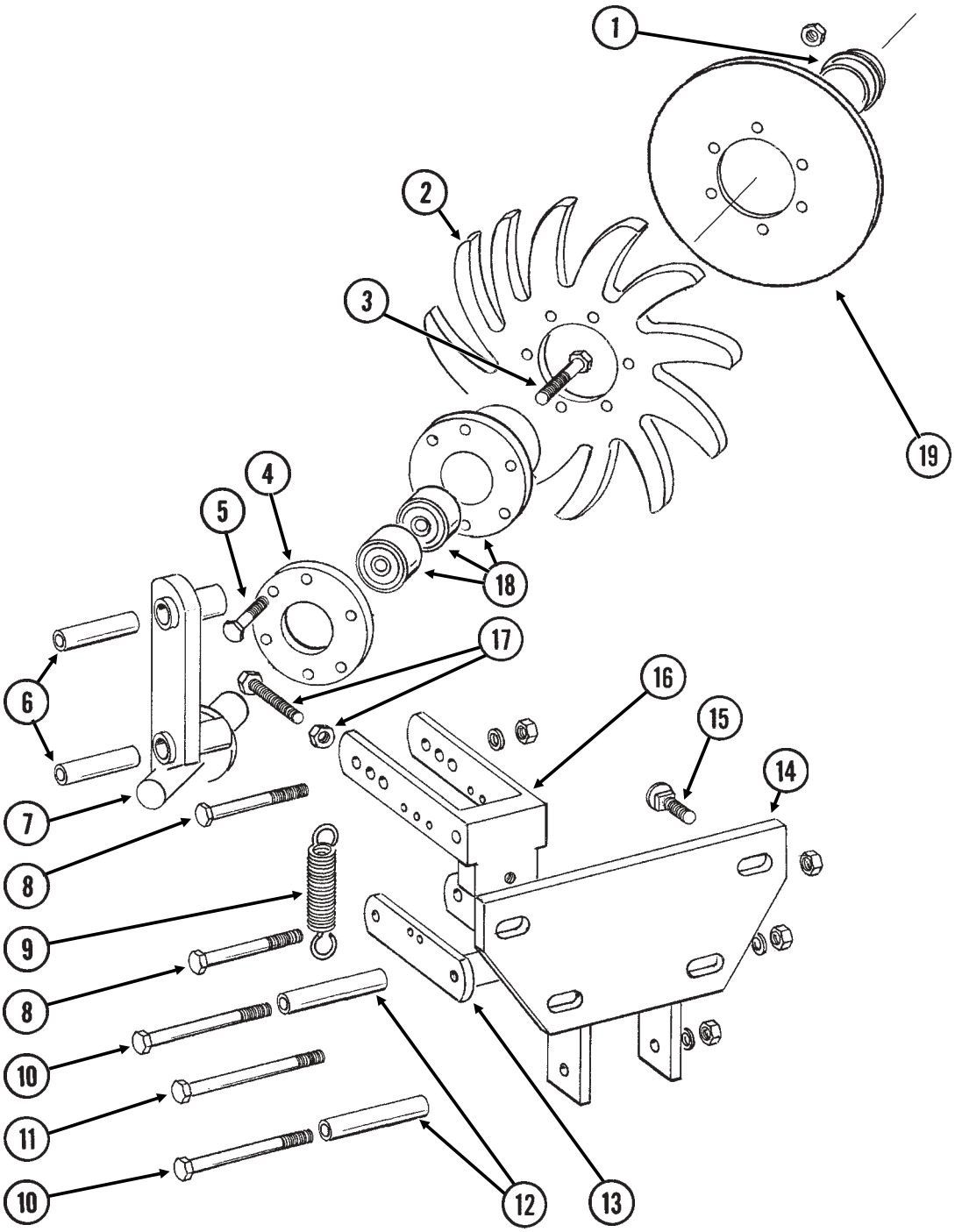


ROW UNIT MOUNTED DISC FURROWER

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10536	1	Detent Pin, 1/2" x 2 1/2" Grip
2.	G10597	1	Square Head Set Screw, 5/8"-11 x 2 1/4"
3.	G10503	1	Hex Jam Nut, 5/8"-11, Grade 2
4.	GA5719	1	Mounting Bracket
5.	GD7889	6	Bushing
6.	G10039	2	Hex Head Cap Screw, 1/2"-13 x 1 3/4"
	G10216	2	Washer, 1/2" USS
	G10111	2	Lock Nut, 1/2"-13
7.	G10585	1	Hex Head Cap Screw, 1/2"-13 x 3 1/4"
	G10216	2	Washer, 1/2" USS
	G10111	1	Lock Nut, 1/2"-13
8.	GD7890	2	Link
9.	G10017	2	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10216	2	Washer, 1/2" USS
	G10111	2	Lock Nut, 1/2"-13
10.	GA5715	1	Anchor
11.	G10017	2	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10111	2	Lock Nut, 1/2"-13
12.	GA5718	1	Support Arm
13.	G10572	6	Truss Head Slotted Machine Screw, 5/16"-18 x 7/8"
	G10106	6	Hex Nut, 5/16"-18
14.	GD1132	2	Dust Cap
15.	G10318	2	Hex Head Cap Screw, 5/8"-11 x 4 1/2"
	GD7805	2	Special Washer, 5/8", Hardened
	G10107	2	Lock Nut, 5/8"-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 3/4" Long
	GD7817-04	2	Spacer, 11/16" I.D. x 1/2" Long

ROW UNIT MOUNTED RESIDUE WHEEL

(RU103d)

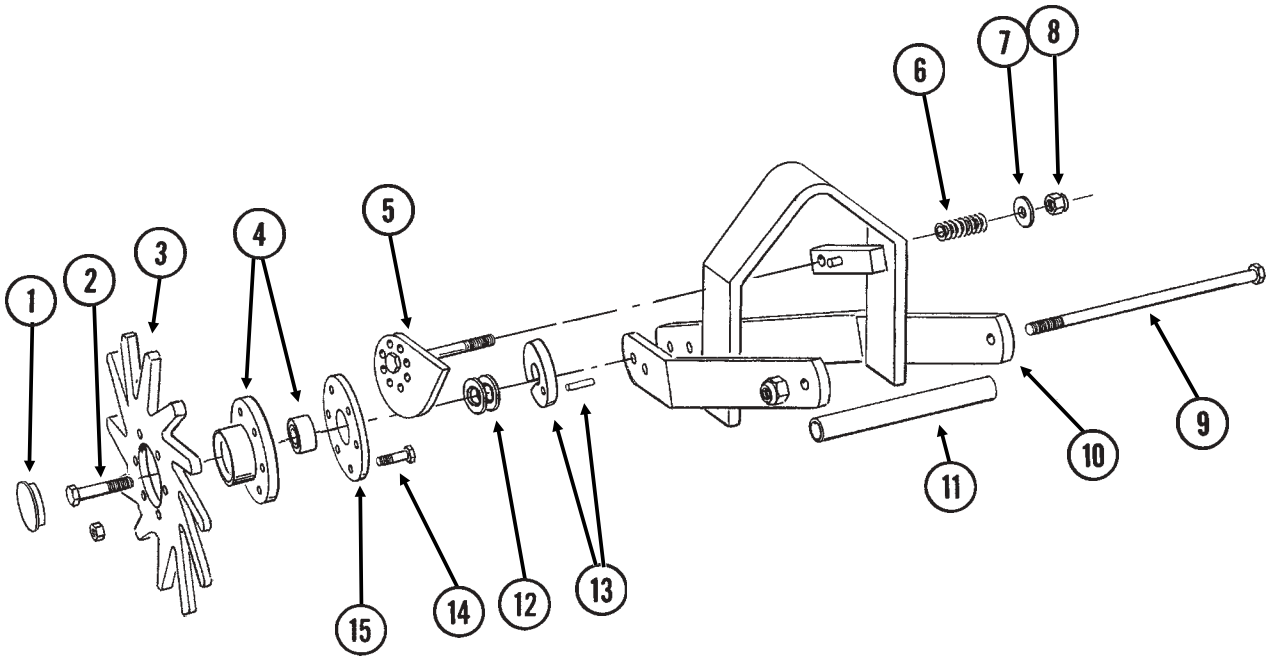


ROW UNIT MOUNTED RESIDUE WHEEL

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

COULTER MOUNTED RESIDUE WHEELS

RUA063(RU104p)



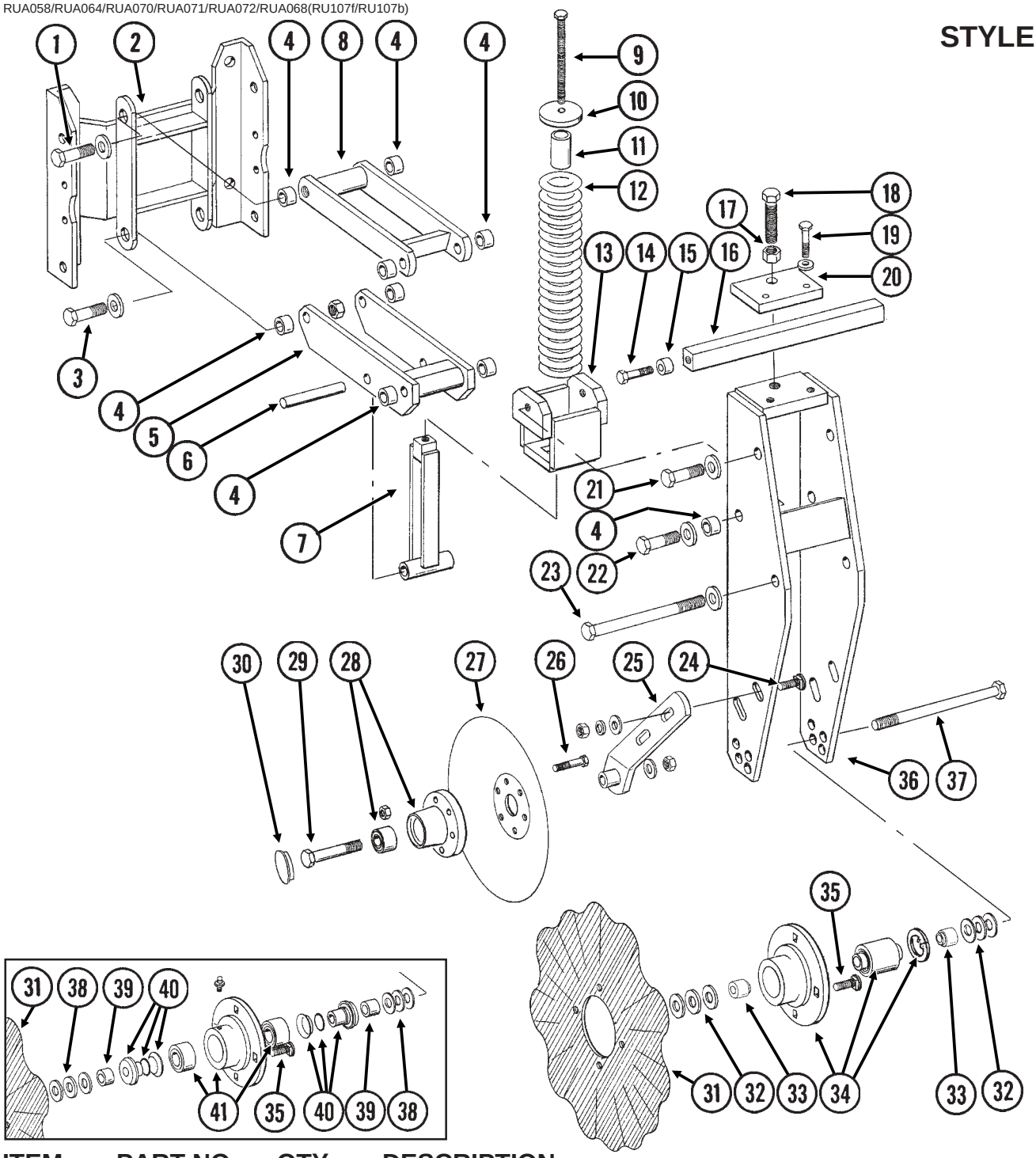
COULTER MOUNTED RESIDUE WHEELS

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	GD1132	2	Dust Cap
2.	G10009	2	Hex Head Cap Screw, 5/8"-11 x 2 1/2"
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.	G10148	1	Hex Head Cap Screw, 1/2"-13 x 9 1/2"
	G10974	1	Lock Nut W/Nylon Insert, 1/2"-13
10.	GA7271	1	Mount
11.	GD10526	1	Sleeve, 7 1/2"
12.	G10213	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
15.	GD9724	2	Backing Plate
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)

FRAME MOUNTED COULTER W/DISC FURROWER

RUA058/RUA064/RUA070/RUA071/RUA072/RUA068(RU107f/RU107b)

STYLE A



ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G10008	2	Hex Head Cap Screw, 5/8"-11 x 2"
	GD7805	2	Special Washer, 5/8", Hardened
2.	GA5798	1	Support Plate
3.	G10008	2	Hex Head Cap Screw, 5/8"-11 x 2"
	GD7805	2	Special Washer, 5/8", Hardened
	G10107	2	Lock Nut, 5/8"-11
4.	GB0218	10	Bushing, 21/32" I.D. x 7/8" O.D. x 19/32" Long
5.	GA5631	1	Lower Parallel Link
6.	GD7815	1	Pin, 5/8" x 4 1/4"
7.	GA5635	1	Spring Guide

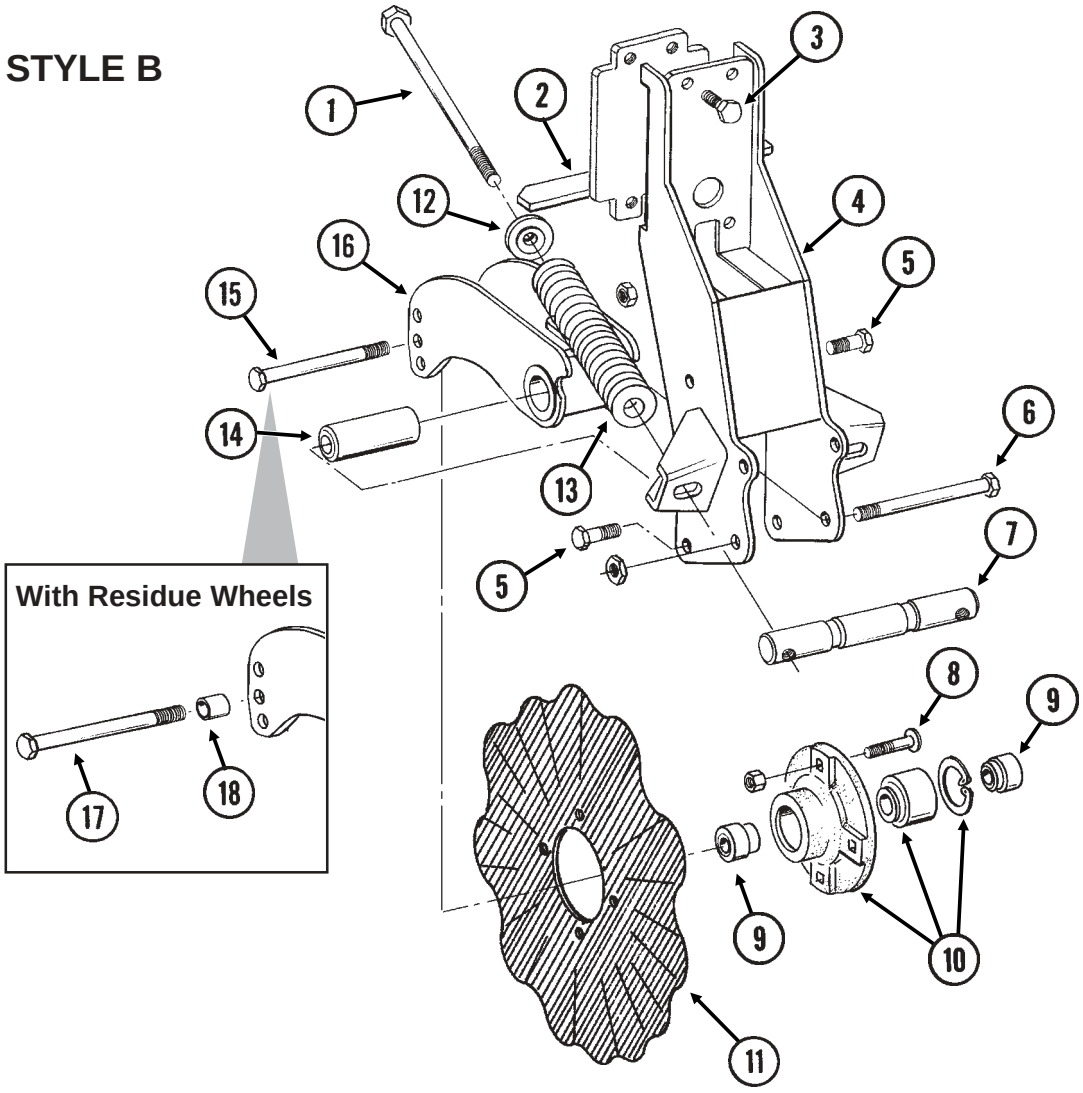
FRAME MOUNTED COULTER W/DISC FURROWER

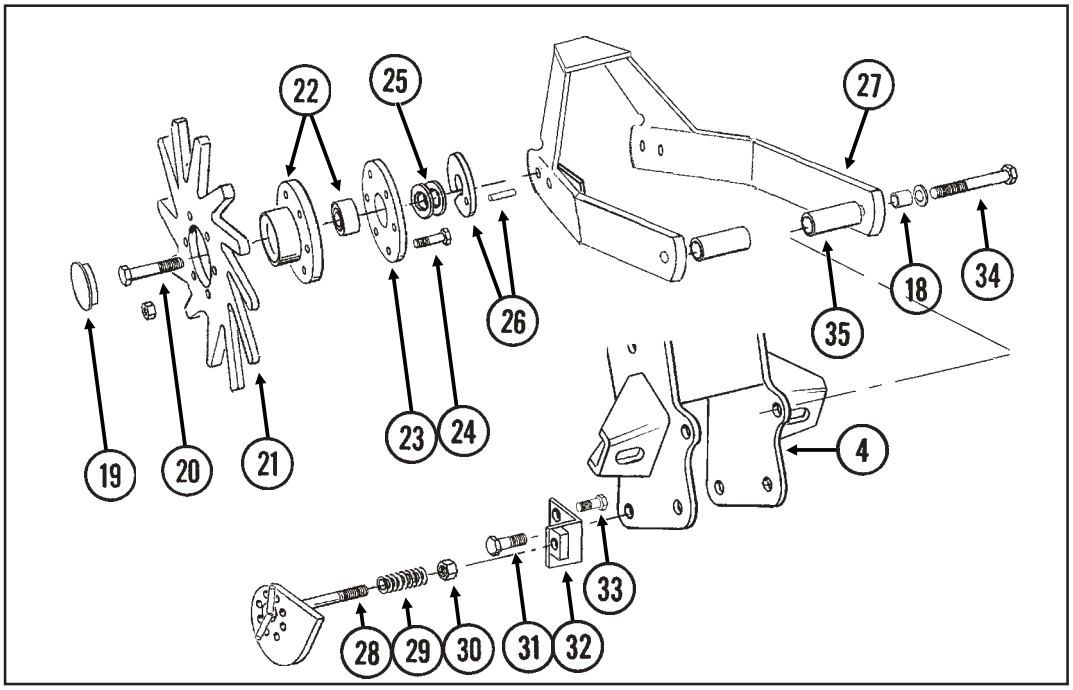
ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
8.	GA5630	1	Upper Parallel Link
9.	G10573	1	Hex Head Cap Screw, 5/8"-11 x 5 1/2", Full Thread
10.	GB0196	1	Washer
11.	GD7817-09	1	Spacer, 11/16" I.D. x 1 3/4" Long
12.	GD7831	1	Compression Spring
13.	GA5637	1	Spring Socket
14.	GD7818	2	Special Bolt
15.	GD7817-01	2	Spacer, 11/16" I.D. x 3/4" Long
16.	GD7816	1	Depth Control Bar
17.	G10104	1	Hex Nut, 5/8"-11
18.	G10582	1	Hex Head Cap Screw, 5/8"-11 x 4", Full Thread
19.	G10581	2	Hex Head Cap Screw, 1/2"-13 x 2 1/4"
	G10228	2	Lock Washer, 1/2"
20.	GD7811	1	Depth Adjustment Clamp
21.	G10008	2	Hex Head Cap Screw, 5/8"-11 x 2"
	GD7805	2	Special Washer, 5/8", Hardened
	GD1109	-	Bushing, 41/64" I.D. x 7/8" O.D. x 1/4" Long (As Required)
	G10107	1	Lock Nut, 5/8"-11
22.	G10055	2	Hex Head Cap Screw, 5/8"-11 x 1 1/4"
	GD7805	2	Special Washer, 5/8", Hardened
23.	G10012	1	Hex Head Cap Screw, 5/8"-11 x 6 1/2"
	GD7805	2	Special Washer, 5/8", Hardened
	GD1109	-	Bushing, 41/64" I.D. x 7/8" O.D. x 1/4" Long (As Required)
	G10107	1	Lock Nut, 5/8"-11
24.	G10747	4	Carriage Bolt, 1/2"-13 x 2"
	G10206	-	Washer, 1/2" SAE (As Required)
	G10228	4	Lock Washer, 1/2"
	G10102	4	Hex Nut, 1/2"-13
25.	GA5636	2	Arm
26.	G10572	12	Truss Head Slotted Machine Screw, 5/16"-18 x 7/8"
	G10106	12	Hex Nut, 5/16"-18
27.	GD7823	2	Disc Blade, Solid, 12" (Shown)
	GD8307	-	Disc Blade, Notched, 12"
28.	GA5654	2	Hub W/Bearings
	GA2014	4	Bearing
29.	G10036	2	Hex Head Cap Screw, 5/8"-11 x 4"
	G10107	2	Lock Nut, 5/8"-11
30.	GD1132	2	Dust Cap
31.	GD7803	1	Disc Blade, Fluted, 1", 8 Flutes (Shown)
	GD7804	-	Disc Blade, Bubbled, 1"
	GD9254	-	Disc Blade, Fluted, 3/4", 13 Flutes
32.	G10213	-	Machine Bushing, 5/8" (.030" Thick) (As Required)
	G10918	-	Machine Bushing, 5/8", 14 Gauge (As Required)
33.	GD11698	2	Adapter
34.	GA8641	1	Hub W/Bearing And Retaining Ring
	GA8603	-	Double Row Bearing
	GD11652	-	Retaining Ring, 2 7/16"
35.	G10574	4	Carriage Bolt, 1/2"-13 x 1 1/4"
	G10111	4	Lock Nut, 1/2"-13
36.	GA5643	1	Fork Mount
37.	G10068	1	Hex Head Cap Screw, 5/8"-11 x 6"
	G10107	1	Lock Nut, 5/8"-11
38.	G10217	-	Washer, 5/8" USS (As Required)
39.	GD7817-04	2	Spacer, 11/16" I.D. x 1/2" Long
40.	GB0227	2	Adapter W/O-Ring And Spring Washer
	GD8844	-	O-Ring
	GD8843	-	Spring Washer
41.	GA5640	1	Hub W/Bearings And Grease Fitting **(Sub G1K290)**
	GA5622	-	Bearing (2 Used Per Hub)
	G10640	-	Grease Fitting, 1/4"-28

FRAME MOUNTED COULTER

(RU135c/RU135g/RU135h)

STYLE B





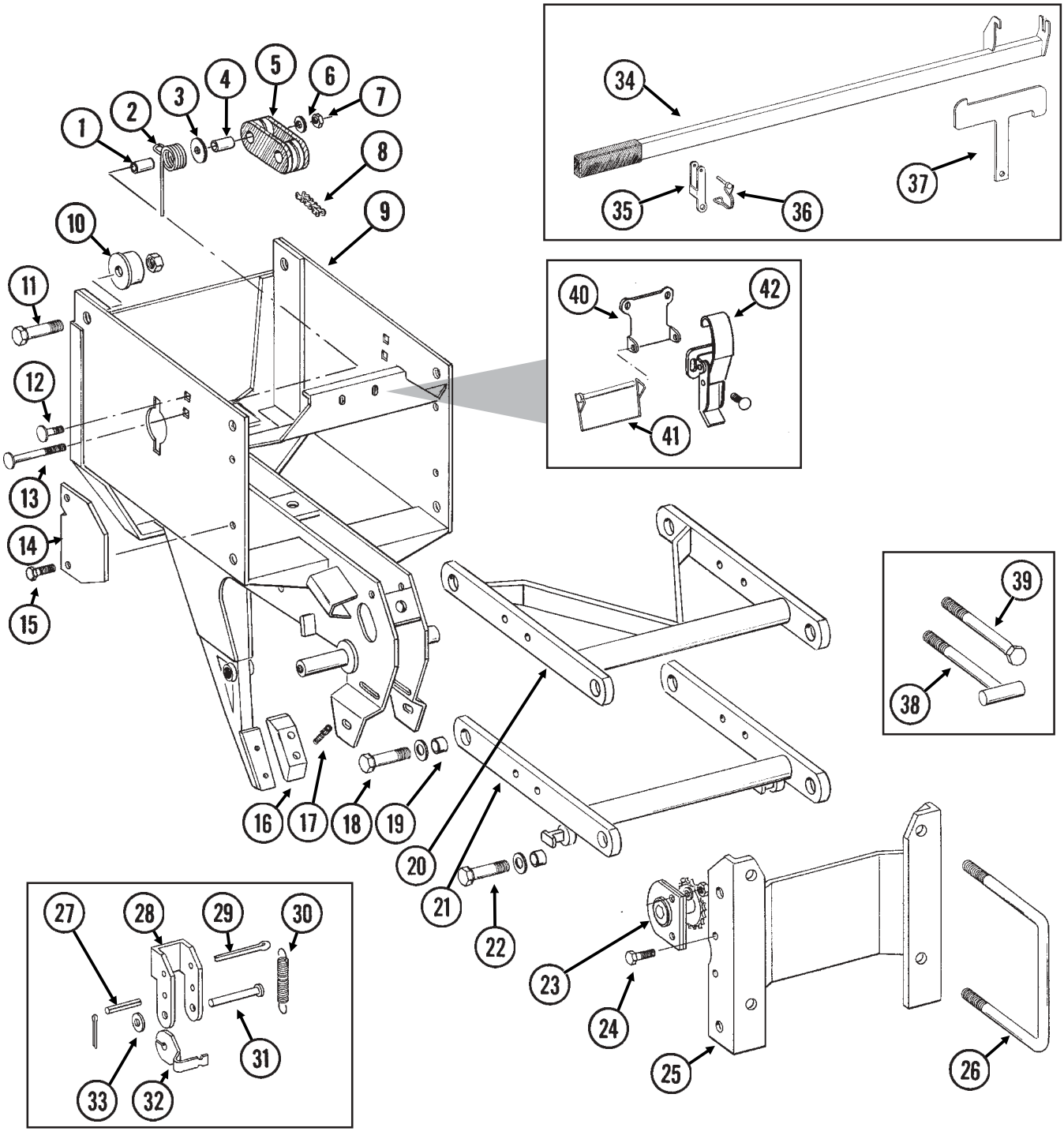
FRAME MOUNTED COULTER

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	G11010	2	Hex Head Cap Screw, 3/4"-10 x 12"
2.	GA9844	1	Plate W/Angle
3.	G10039	4	Hex Head Cap Screw, 1/2"-13 x 1 3/4"
4.	GA9131	1	Coulter Frame
5.	G10007	4	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
	G10107	4	Lock Nut, 5/8"-11
6.	G10400	1	Hex Head Cap Screw, 3/4"-10 x 6 1/2"
	G10112	1	Lock Nut, 3/4"-10
7.	GD12826	1	Spring Anchor Bar
8.	G10574	4	Carriage Bolt, 1/2"-13 x 1 1/4"
	G10111	4	Lock Nut, 1/2"-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, 3/4", 13 Flutes
12.	GB0213	2	Spring Seat
13.	GD12817	2	Compression Spring
14.	GD12829	1	Sleeve
15.	G10046	1	Hex Head Cap Screw, 5/8"-11 x 5"
	G10107	1	Lock Nut, 5/8"-11
16.	GA9845	1	Coulter Arm W/Grease Fitting
	G10643	-	Grease Fitting, 45°, 1/4"-28
17.	G10011	1	Hex Head Cap Screw, 5/8"-11 x 5 1/2"
	G10107	1	Lock Nut, 5/8"-11
18.	GB0218	3	Bushing, 21/32" I.D. x 7/8" O.D. x 19/32" Long
19.	GD1132	2	Dust Cap
20.	G10009	2	Hex Head Cap Screw, 5/8"-11 x 2 1/2"
21.	GD10552	2	Wheel, 12 Tine, 3/8" 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 1/2"
	G10109	12	Lock Nut, 5/16"-18
25.	G10213	4	Machine Bushing, 5/8" (.030" Thick)
26.	GA9862	2	Weed Guard W/Spring Pin
	G10765	-	Spring Pin, 1/4" x 1"
27.	GA9865	1	Mount
28.	GA9861	1	Cam
29.	GD10519	1	Spring
30.	G10974	1	Lock Nut W/Nylon Insert, 1/2"-13
31.	G10005	1	Hex Head Cap Screw, 5/8"-11 x 1 3/4"
	G10107	4	Lock Nut, 5/8"-11
32.	GA9864	1	Support
33.	G10014	1	Hex Head Cap Screw, 1/2"-13 x 1"
	G10102	1	Hex Nut, 1/2"-13
34.	G10011	2	Hex Head Cap Screw, 5/8"-11 x 5 1/2"
	G10205	2	Washer, 5/8" SAE
	G10730	2	Nylon Insert Lock Nut, 5/8"-11
35.	GD14170	2	Sleeve, 3"
A.	GA7446	-	Wheel Assembly, 12 Tine, R.H. (Items 21-24) (Shown)
	GA7445	-	Wheel Assembly, 12 Tine, L.H. (Items 21-24)

INTERPLANT® PUSH ROW UNIT

RPU011/RPU012/RPU013(RU89r/RU86k/RU121/RU89q)

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 mini-hopper as the pull row unit. See those pages for common parts.



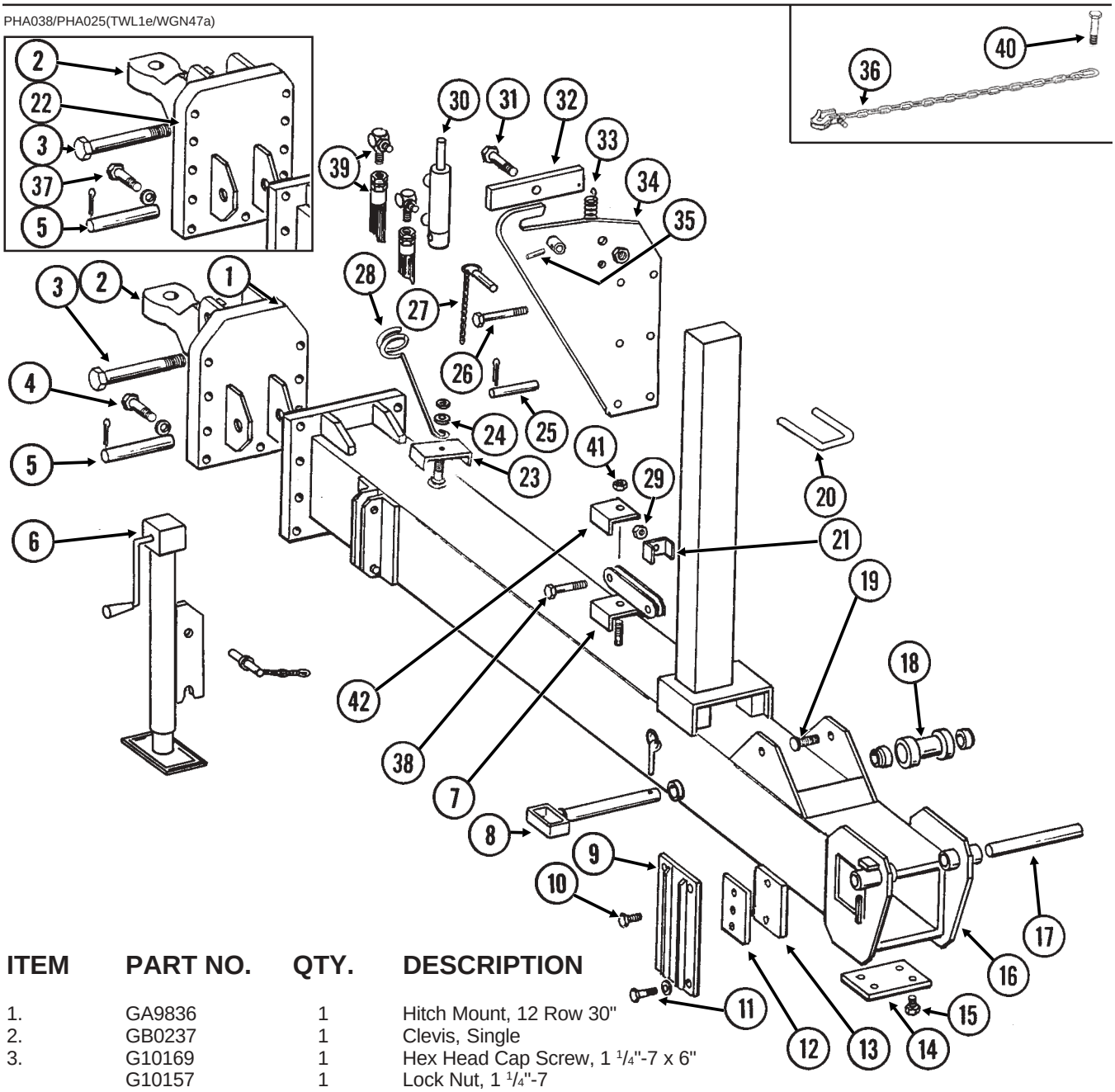
ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
1.	GD8893-01	1	Sleeve, 1 3/8" Long
2.	GD11218	1	Spring
3.	G10201	1	Special Washer, 3/8" x 1 1/2" O.D.
4.	GD1026	1	Sleeve, 1 3/16" Long

INTERPLANT® PUSH ROW UNIT

ITEM	PART NO.	QTY. (Per Row)	DESCRIPTION
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.	GA8037	-	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.	GA8930	-	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.	GA1720	1	Bearing/Sprocket, 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.	GA5786	1	Mounting Plate
26.	GD1113	2	U-Bolt, 5" x 7" x 5/8"-11
	G10230	4	Lock Washer, 5/8"
	G10104	4	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.	GD11659	1	Bracket
36.	GD9695	1	Wire Lock Pin, 1/4" x 1 3/4"
37.	GD11752	1	Mount
38.	GA9105	-	T-Bolt, 5/8"-11 x 6"
	G10230	-	Lock Washer, 5/8"
	G10104	-	Hex Nut, 5/8"-11
39.	G10830	-	Hex Head Cap Screw, 5/8"-11 x 7 1/2"
	G10230	-	Lock Washer, 5/8"
	G10104	-	Hex Nut, 5/8"-11
40.	GD13110	-	Retainer
41.	GD10705	-	Locking Clip Pin, 1/4" x 2 1/2"
42.	GA2007	-	Hopper Hold Down Latch

OUTER HITCH/SAFETY CHAIN

PHA038/PHA025(TWL1e/WGN47a)



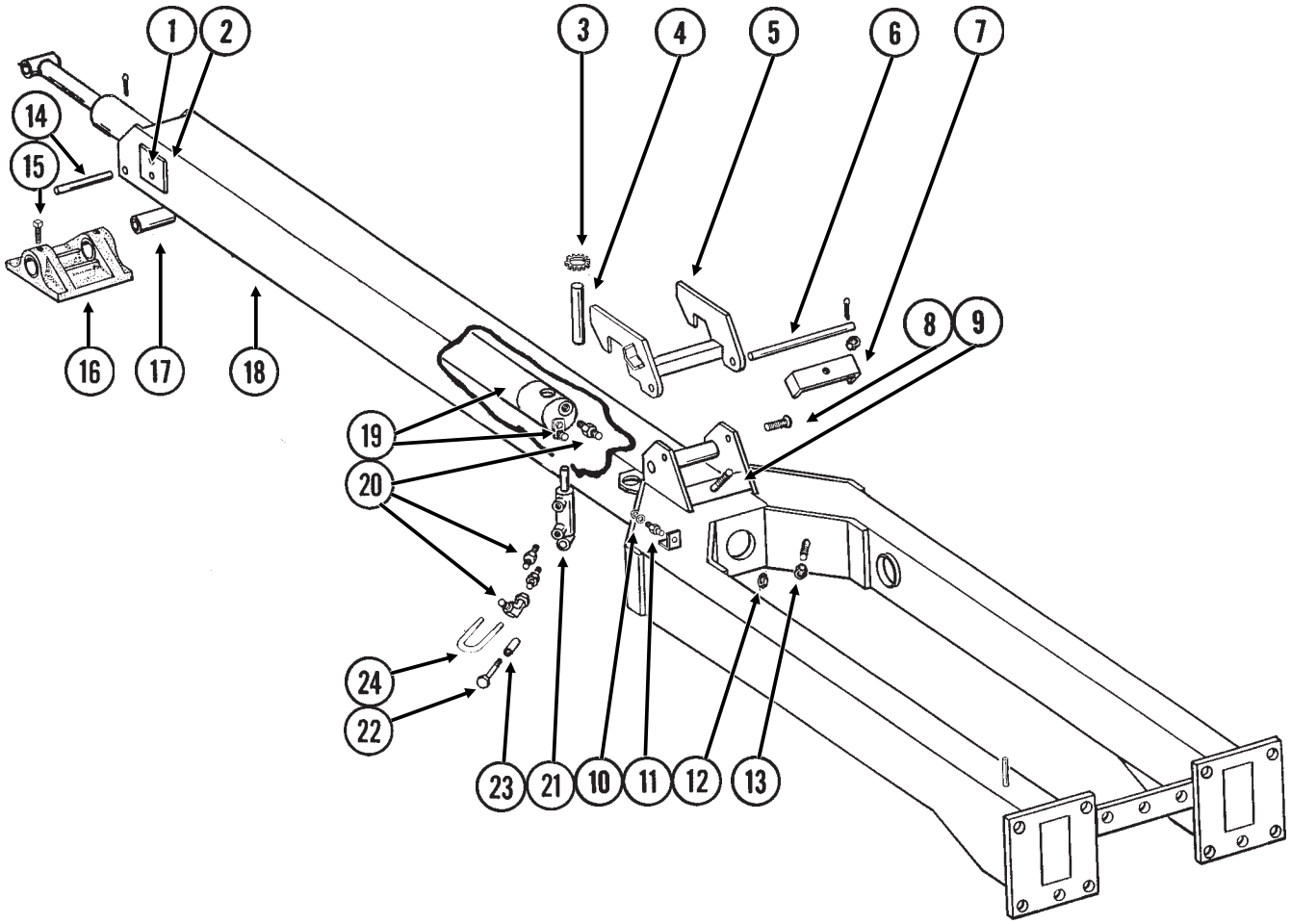
ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA9836	1	Hitch Mount, 12 Row 30"
2.	GB0237	1	Clevis, Single
3.	G10169	1	Hex Head Cap Screw, 1 1/4"-7 x 6"
	G10157	1	Lock Nut, 1 1/4"-7
4.	G10009	9	Hex Head Cap Screw, 5/8"-11 x 2 1/2"
	G10230	9	Lock Washer, 5/8"
	G10104	9	Hex Nut, 5/8"-11
5.	GD5173	1	Pin, 1 1/4" x 5 1/8"
	G10462	2	Cotter Pin, 3/16" x 2"
6.	GA4994	1	Jack Assembly Complete
	GA4995	-	Detent Pin Assembly
	GR0517	-	Pin
	GR0516	-	Crank Assembly
	GR0515	-	Bevel Gear
7.	GA5842	1	Bracket, Jack Mount
	GD8189	-	Rubber Pad
8.	GA4402	1	Safety Pin, 12 3/4", 12 Row 30"
	GA4845	-	Safety Pin, 14 3/4", 16 Row 30"
	GD2558	-	Lynch Pin, 1/4"
	GD2557	-	Lynch Pin, 7/16"
9.	GA7029	2	Wear Mount, 12 Row 30"
	GA7084	-	Wear Mount, L.H., 16 Row 30"
	GA7085	-	Wear Mount, R.H., 16 Row 30"
	GA7083	-	Wear Pad Retainer, 16 Row 30"

OUTER HITCH/SAFETY CHAIN

ITEM	PART NO.	QTY.	DESCRIPTION
10.	G10016	8	Hex Head Cap Screw, 1/2"-13 x 2"
	G10216	8	Washer, 1/2" USS
11.	G10017	8	Hex Head Cap Screw, 1/2"-13 x 1 1/2", 12 Row 30"
	G10016	10	Hex Head Cap Screw, 1/2"-13 x 2", 16 Row 30"
	G10228	8-10	Lock Washer, 1/2"
	G10102	8-10	Hex Nut, 1/2"-13
12.	GD5154	-	Shim, 4" x 4" (As Required), All Sizes
	GD3501	-	Shim, 4" x 6" (As Required), 16 Row 30"
13.	GD9959	-	Wear Pad, Nylatron, 4" x 4" (As Required), All Sizes
	GD9960	-	Wear Pad, Nylatron, 4" x 6" (As Required), 16 Row 30"
14.	GD7519	3	Shim, 16 Gauge (16 Row 30" Only)
	GD7518	1	Shim, 3/8" (16 Row 30" Only)
15.	G10014	4	Hex Head Cap Screw, 1/2"-13 x 1"
	G10228	4	Lock Washer, 1/2"
	G10216	4	Washer, 1/2" USS
16.	A7010	-	Outer Hitch, "Y", 97", 12 Row 30" **(Non-Stock Item)**
	A7088	-	Outer Hitch, "Y", 127 1/2", 16 Row 30" **(Non-Stock Item)**
17.	GD5804	1	Pin, 1 1/4" x 12", 12 Row 30"
	GD7251	1	Pin, 14", 16 Row 30"
	G10610	2	Spring Pin, 3/8" x 2"
18.	GA4418	1	Roller W/Bronze Bushings, 12 Row 30"
	GA4842	-	Roller W/Bronze Bushings, 16 Row 30"
	GD6556	1	Bronze Bushing
19.			See "Hose Take-Up", Pages P46 And P47
20.	GD9953	3	U-Bolt, 3" x 4" x 5/8"-11
	G10205	1	Washer, 5/8" SAE
	G10230	6	Lock Washer, 5/8"
	G10104	6	Hex Nut, 5/8"-11
21.	GD5892	2	Hose Clamp, 5/8" x 1 1/2" x 1 1/2"
22.	GA9837	-	Hitch Mount, 16 Row 30"
23.	GD8188	-	Clamp, 3" x 5 3/8"
	GD8189	-	Rubber Pad
24.	G10216	1	Washer, 1/2" USS
	G10111	1	Lock Nut, 1/2"-13
25.	GD7137	1	Pin, 3/4" x 3 3/8"
	G10457	2	Cotter Pin, 5/32" x 1 1/2"
26.	G10809	1	Hex Head Cap Screw, 3/8"-16 x 3 1/4"
	GD2971-09	1	Sleeve, 2" Long
	G10108	1	Lock Nut, 3/8"-16
27.	GA7022	1	Detent Pin W/Chain (Transport Latch Locking Pin)
28.	GD8260	1	Hose Holder
29.	G10108	1	Lock Nut, 3/8"-16
30.			See "Transport Latch Cylinder", Page P83
31.	G10006	1	Hex Head Cap Screw, 5/8"-11 x 2 1/4"
	GB0218	1	Bushing, 21/32" I.D. x 7/8" O.D. x 19/32" Long
	GD7805	1	Special Washer, 5/8", Hardened
	G10107	1	Lock Nut, 5/8"-11
32.	GA7016	1	Catch Bar
33.	GD5857	1	Spring
34.	GA7433	1	Transport Latch
35.	G10765	-	Spring Pin, 1/4" x 1"
36.	GA7533	1	Safety Chain, 1/2"
37.	G10802	11	Hex Head Cap Screw, 3/4"-10 x 2 3/4"
	G10231	11	Lock Washer, 3/4"
	G10105	11	Hex Nut, 3/4"-10
38.	G10026	1	Hex Head Cap Screw, 3/4"-10 x 2"
	G10112	1	Lock Nut, 3/4"-10
39.		-	See "Hydraulic Hoses And Fittings On Hitch", Pages P96 And P97
40.	G11058	1	Hex Head Cap Screw, 1 1/4"-7 x 3"
	GD10646	1	Special Washer
	G10226	1	Washer, 1 1/4" SAE
	G10157	1	Lock Nut, 1 1/4"-7
41.	G10111	1	Lock Nut, 1/2"-13
42.	GD14121	1	Hose Clamp

INNER HITCH, “Y”

PHA035/PHA037(TWL2e)

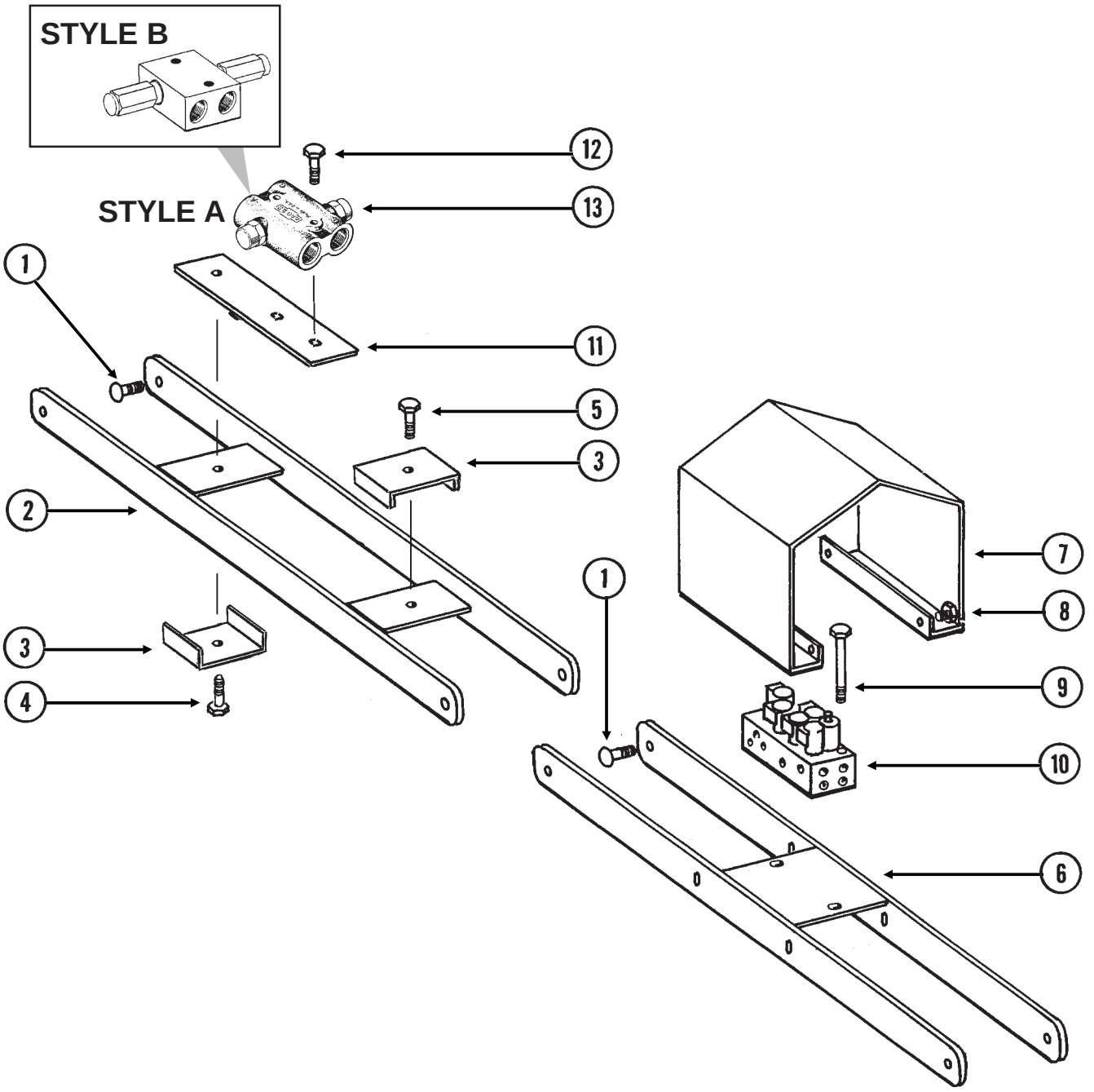


INNER HITCH, “Y”

ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10017	4	Hex Head Cap Screw, 1/2"-13 x 1 1/2", 16 Row 30"
	G10014	-	Hex Head Cap Screw, 1/2"-13 x 1", 12 Row 30"
	G10228	4-6	Lock Washer, 1/2"
2.	GD9959	2	Wear Pad, Nylatron, 4" x 4"
	GD5154	4	Shim, 4" x 4"
3.	G10894	-	External Washer
4.	GD3537-17	1	Shaft, 1 1/4" x 6 3/8", 12 Row 30"
	GD3537-18	-	Shaft, 1 1/4" x 7 3/8", 16 Row 30"
5.	GA7423	1	Tongue Hook W/Grease Fittings, 12 Row 30"
	GA7424	-	Tongue Hook W/Grease Fittings, 16 Row 30"
	G10641	-	Grease Fitting, 1/8" NPT
6.	GD5804	1	Pin, 1 1/4" x 12", 12 Row 30"
	GD7883	-	Pin, 1 1/4" x 14 1/2", 16 Row 30"
	G10468	2	Cotter Pin, 3/8" x 2"
7.	GD8188	-	Clamp, 3" x 5 3/8"
	GD8189	-	Rubber Pad
8.			See “Hose Take-Up”, Pages P46 And P47
9.	G10581	1	Hex Head Cap Screw, 1/2"-13 x 2 1/4"
	G10111	1	Lock Nut, 1/2"-13
10.	G10237	1	Lock Washer, 7/16"
	G10100	1	Hex Nut, 7/16"-14
11.	GD8276	1	Pin
12.	G10108	1	Lock Nut, 3/8"-16
13.	G10111	1	Lock Nut, 1/2"-13
14.	GD5173	1	Pin, 1 1/4" x 5 1/8"
	G10462	1	Cotter Pin, 3/16" x 2"
15.	G10131	1	Square Head Set Screw, 5/16"-18 x 3/4"
16.	GB0246	1	Shoe
17.	GD3537-11	1	Shaft, 1 1/4" x 7", 12 Row 30"
	GD3537-12	-	Shaft, 1 1/4" x 8", 16 Row 30"
18.	A9146	-	Inner Hitch, 169 3/8", 12 Row 30" (Shown) **(Non-Stock Item)**
	A9151		Inner Hitch, 205 3/8", 16 Row 30" **(Non-Stock Item)**
19.		-	See “Tongue Cylinder”, Pages P85 And P86
20.		-	See “Hydraulic Hoses And Fittings On Hitch”, Pages P96 And P97
21.		-	See “Tongue Lock Cylinder”, Page P84
22.	G10585	1	Hex Head Cap Screw, 1/2"-13 x 3 1/4"
	G10216	1	Washer, 1/2" USS
	G10228	1	Lock Washer, 1/2"
	G10102	1	Hex Nut, 1/2"-13
23.	GD10538-01	1	Sleeve
24.	GD10530	1	U-Bolt, 2 1/8" x 1 7/8" x 3/8"-16
	G10229	2	Lock Washer, 3/8"
	G10101	2	Hex Nut, 3/8"-16

HOSE TAKE-UP

PHA039(TWL137/TWL171)



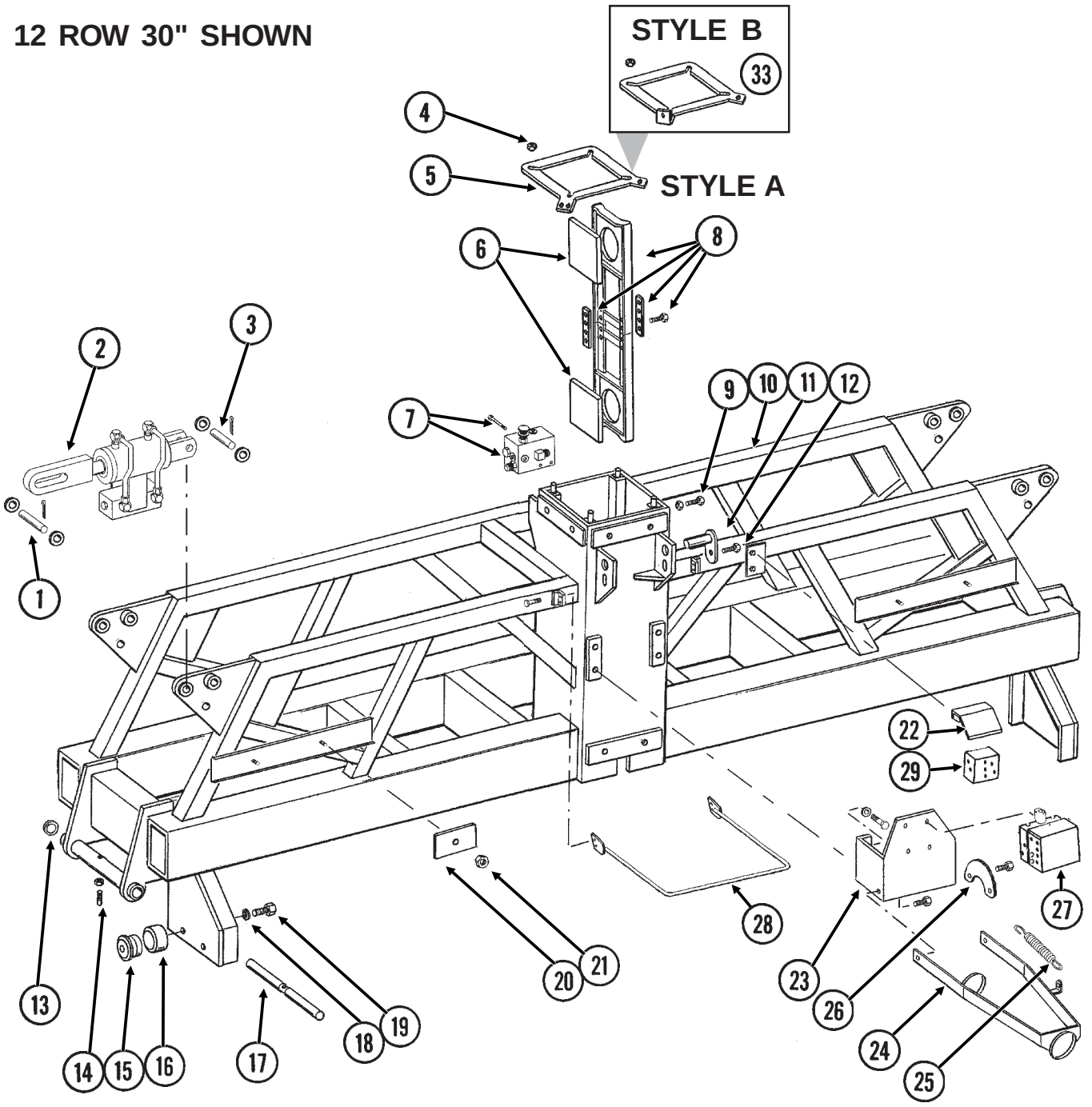
HOSE TAKE-UP

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 30" (Shown)
	GA7049	-	Take-Up, 56 1/4", 16 Row 30"
3.	GD8188	2	Clamp, 3" x 5 3/8"
	GD8189	2	Rubber Pad
4.	G10581	1	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 30" (Shown)
	GA7050	-	Take-Up, 56 1/4", 16 Row 30"
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”, Page P92
11.	GA8131	1	Mount, All 12 Row 30", 16 Row 30" If Applicable
12.	G10902	2	Carriage Bolt, 5/16"-18 x 2 1/2"
	G10232	2	Lock Washer, 5/16"
	G10106	2	Hex Nut, 5/16"-18
13.		-	See “Relief Valve - Located On Hitch”, All 12 Row 30", 16 Row 30" (If Applicable), Page P95

CENTER FRAME

PFA085/PHS051(TWL193b)

12 ROW 30" SHOWN



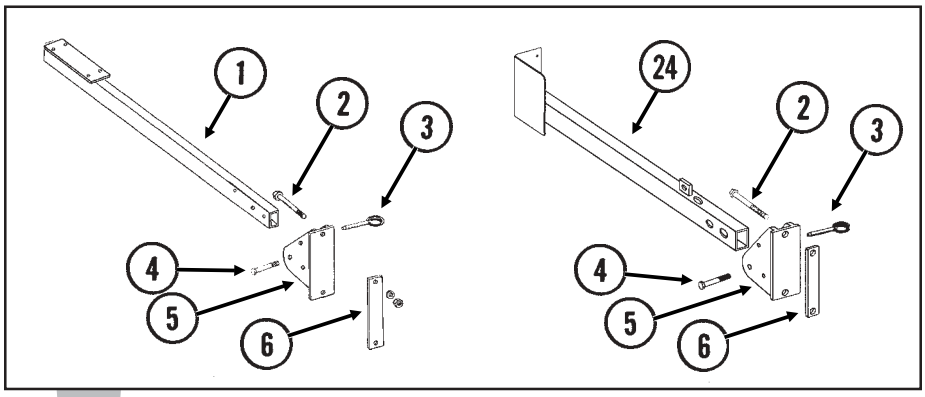
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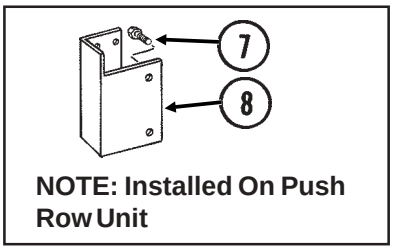
ITEM	PART NO.	QTY.	DESCRIPTION
1.		-	See “Wing Frame”, Pages P50 And P51
2.		-	See “Wing Lock Cylinders”, Pages P81 And P82
3.	GD0535	2	Pin, 1 1/4" x 4 1/2"
	G10159	4	Machine Bushing, 1 1/4", 10 Gauge
	G10460	4	Cotter Pin, 1/4" x 2"
4.	GD7805	4	Special Washer, 5/8", Hardened
	G10104	4	Hex Nut, 5/8"-11
5.	GD12819	1	Cap
6.	GD10053	8	Wear Pad, 7" Square
7.		-	See “Valve Block - Located On Front Center Frame”, Page P88
8.	GA7579	4	Pad Holder W/Bars
	GD10706	-	Bar, 1 1/4" x 6" (1/4" Thick)
	GD10707	-	Bar, 1 1/4" x 6" (3/8" Thick)
	G10001	-	Hex Head Cap Screw, 3/8"-16 x 1"
9.	G10543	16	Hex Head Adjusting Bolt, 3/4"-10 x 3"
	G10105	16	Hex Nut, 3/4"-10
10.	A9001	-	Frame, 136", 12 Row 30" And 16 Row 30" **(Non-Stock Item)**
11.	GA5121	4	Pin
12.	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"
13.	G10404	-	Machine Bushing, 3 1/8" x 2 1/8" x 3/16" (As Required)
	G10234	-	Machine Bushing, 2 1/8", 10 Gauge (As Required)
	G10336	-	Machine Bushing, 2 1/8", 14 Gauge (As Required)
14.	G10102	1	Hex Nut, 1/2"-13
	G10828	1	Hex Socket Set Screw, 1/2"-13 x 1 1/4"
15.	GA6497	4	Cam Follower W/Grease Fitting
	G10640	-	Grease Fitting, 1/4"-28
16.	GD14066	4	Sleeve
17.	GD10531	1	Hinge Pin, 2 1/8" x 25 3/4"
18.	GD9052	2	Special Washer, 3/4" I.D. x 2" O.D., Hardened
19.	G10025	2	Hex Head Cap Screw, 3/4"-10 x 1 1/2"
20.	GD13154	4	Hose Clamp, 4 3/4" x 9"
21.	G10108	4	Lock Nut, 3/8"-16
22.	GD14102	1	Cover
23.	GD12774	1	Mount
24.	GA9142	1	Hose Holder
25.	GD8249	1	Spring
	GD7904-02	2	Sleeve, 1/2" x 1/2" Long
26.	GD13107	1	Spring Pivot
27.		-	See “Valve Blocks - Located On Rear Center Frame”, Pages P90 And P91
28.	GA9556	1	Handle
29.		-	See “Valve Block - Located On R.H. Side Of Center Pivot”, Page P89
30.	GD14093	1	Cap

WING FRAME

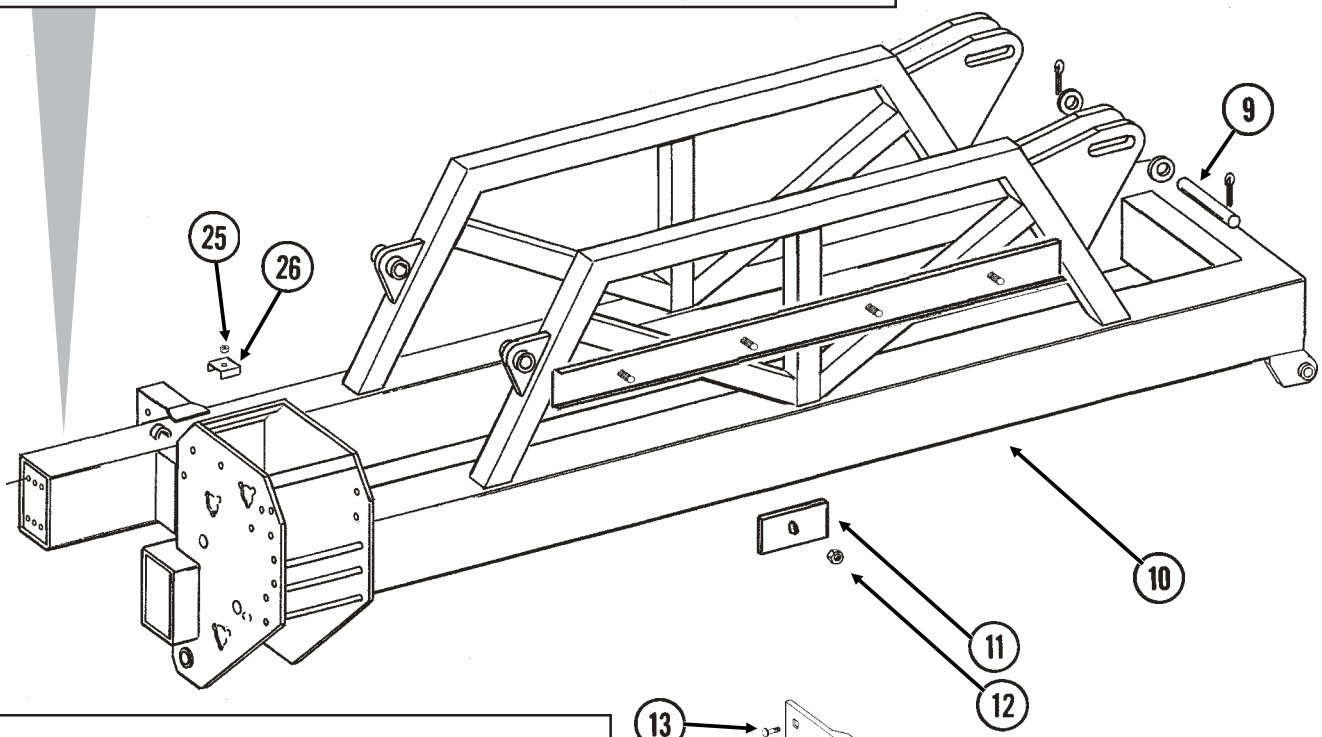
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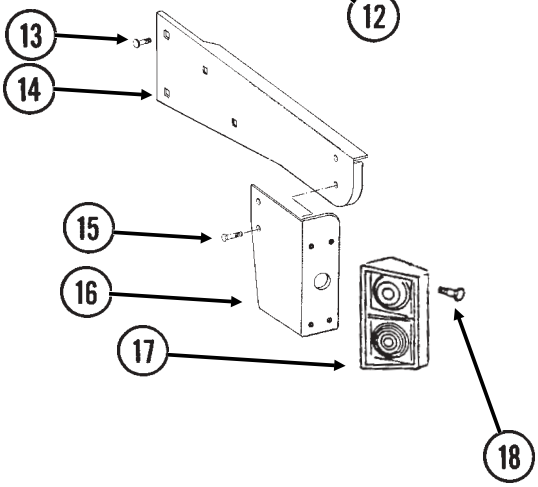
12 ROW 30" SHOWN

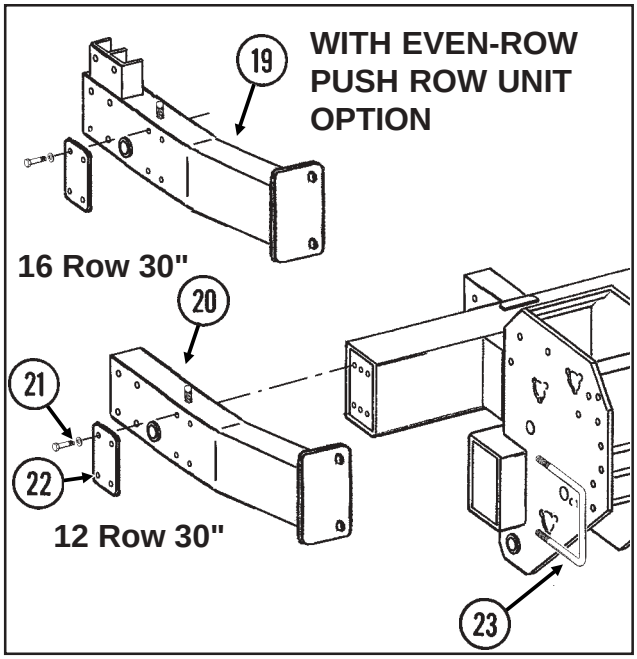




NOTE: Installed On Push Row Unit





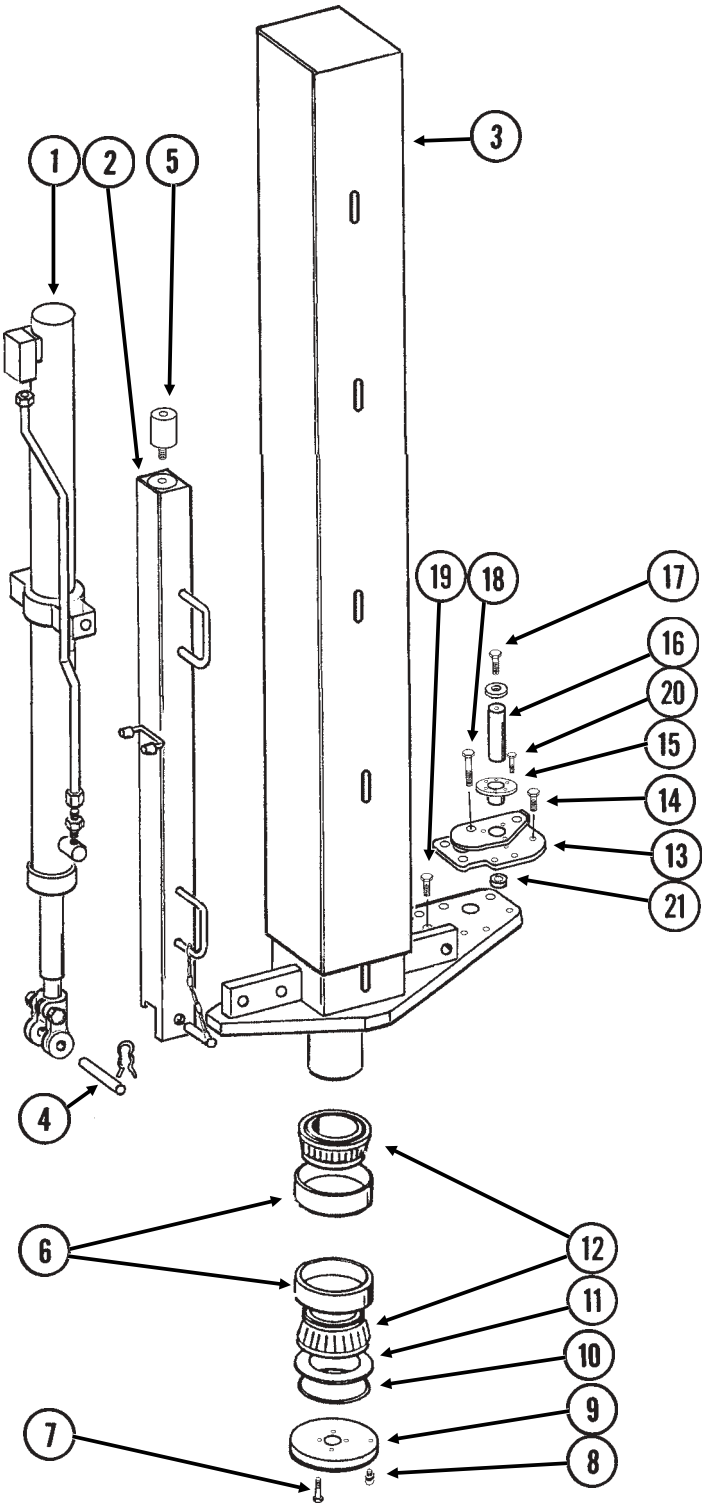


WING FRAME

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA9549	1	Light Bracket
2.	G10439	2	Hex Head Cap Screw, 5/8"-11 x 7"
	G10230	2	Lock Washer, 5/8"
	G10104	2	Hex Nut, 5/8"-11
3.	G10874	1	Detent Pin, 1/2" x 3 1/2" Grip
4.	G10038	1	Hex Head Cap Screw, 1/2"-13 x 3"
	G10111	1	Lock Nut, 1/2"-13
5.	GB0309	1	Light Mount Bracket
6.	GD1908	1	Mounting Bracket
7.	G10001	2	Hex Head Cap Screw, 3/8"-16 x 1"
	G10229	2	Lock Washer, 3/8"
	G10101	2	Hex Nut, 3/8"-16
8.	GD12703	1	Push Row Unit Light Bracket
9.	GD0826	4	Pin, 1 1/4" x 5 1/2"
	GD0752-47	8	Sleeve, 1/2"
	G10159	8	Machine Bushing, 1 1/4", 10 Gauge
	G10460	8	Cotter Pin, 1/4" x 2"
10.	A9070	-	Wing, R.H., 120", 12 Row 30" **(Non-Stock Item)**
	A9069	-	Wing, L.H., 124", 12 Row 30" **(Non-Stock Item)**
	A9072	-	Wing, R.H., 180", 16 Row 30" **(Non-Stock Item)**
	A9073	-	Wing, L.H., 184", 16 Row 30" **(Non-Stock Item)**
11.	GD13153	8-10	Hose Clamp, 3 1/4" x 9"
12.	G10108	8-10	Lock Nut, 3/8"-16
13.	G10312	2	Carriage Bolt, 5/16"-18 x 3/4"
	G10620	2	Flange Nut, 5/16"-18
14.	GD12754	1	Light Mount Extension
15.	G10064	2	Hex Head Cap Screw, 1/4"-20 x 1"
	G10227	2	Lock Washer, 1/4"
	G10103	2	Hex Nut, 1/4"-20
16.	GD12724	1	Bracket
17.			See “Electrical Components”, Pages P102 And P103
18.	G10064	8	Hex Head Cap Screw, 1/4"-20 x 1"
	G10110	8	Lock Nut, 1/4"-20
19.	GA9903	1	Marker Mount, 16 Row 30"
20.	GA9902	1	Marker Mount, 12 Row 30"
21.	G10050	4	Hex Head Cap Screw, 3/4"-10 x 5"
	G10231	4	Lock Washer, 3/4"
22.	GD14163	1	Plate
23.	GD1113	1	U-Bolt, 5" x 7" x 5/8"-11
	G10230	2	Lock Washer, 5/8"
	G10104	2	Hex Nut, 5/8"-11
24.	GA9840	1	Light Bracket
25.	G10108	5	Lock Nut, 3/8"-16
26.	GD5875	5	Hose Clamp, 9/16" x 2 1/2" x 2"
A.	G7698X	-	Push Row Unit Mounted Light Bracket Package (Items 7 And 8 On This Page And 3/8" Insulated Clamp, Item 41 On Pages P102 And P103)

CENTER PIVOT

PFA087(TWL196a)

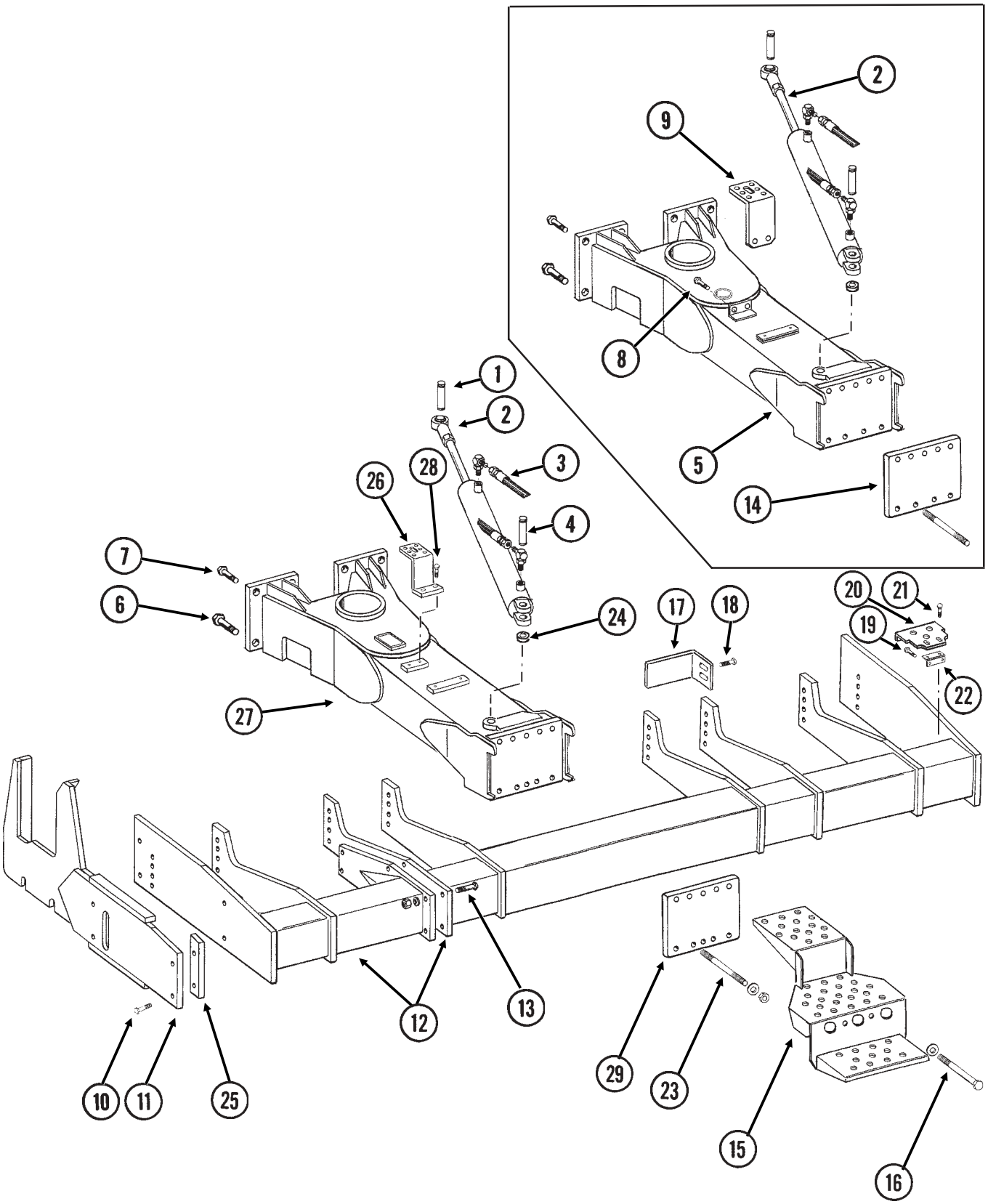


CENTER PIVOT

ITEM	PART NO.	QTY.	DESCRIPTION
1.		-	See “Center Lift Cylinder”, Pages P78 And P79
2.	GA9915	1	Manual Safety Lockup W/Detent Pin
	GA7022	-	Detent Pin W/Chain
3.	GA9089	1	Center Post
4.	GR0375	2	Pin, 1" x 3 1/2"
	GR0193	4	Hair Pin Clip
5.	GD14192	1	Lockup Extension
6.	GD10011	2	Cup
7.	G10027	4	Hex Head Cap Screw, 3/4"-10 x 2 1/2"
	GD2169	4	Special Washer, 25/32" I.D. x 1 1/4" O.D., Hardened
8	G10640	1	Grease Fitting, 1/4"-28
9.	GD13338	1	Bearing Cap
10.	GD13350	1	O-Ring Seal
11.	GD10012	10	Shim, .005" Thick (As Required)
	GD10013	10	Shim, .020" Thick (As Required)
	GD10014	10	Shim, .007" Thick (As Required)
12.	GA7096	2	Cone
13.	GA9618	1	Taper Lock Mount
14.	G11018	3	Hex Head Cap Screw, 5/8"-18 x 1 1/4"
	GD7805	2	Special Washer, 5/8", Hardened
15.	GD13519	1	Taper Lock Collar
16.	GD13520	1	Taper Lock Pin
17.	G10443	1	Hex Head Cap Screw, 5/8"-11 x 1"
	G10205	1	Washer, 5/8" SAE
18.	G11019	2	Hex Head Cap Screw, 5/8"-18 x 5"
	GD7805	2	Special Washer, 5/8", Hardened
19.	G10751	2	Hex Head Cap Screw, 5/8"-18 x 1 3/4"
	GD7805	2	Special Washer, 5/8", Hardened
20.	G10004	3	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
21.	GD13525	1	Tension Bushing, 1 1/2" O.D. x 1 1/4" I.D. x 5/8" Long

AXLE ASSEMBLY

PHA055/PHA056(TWL198d)

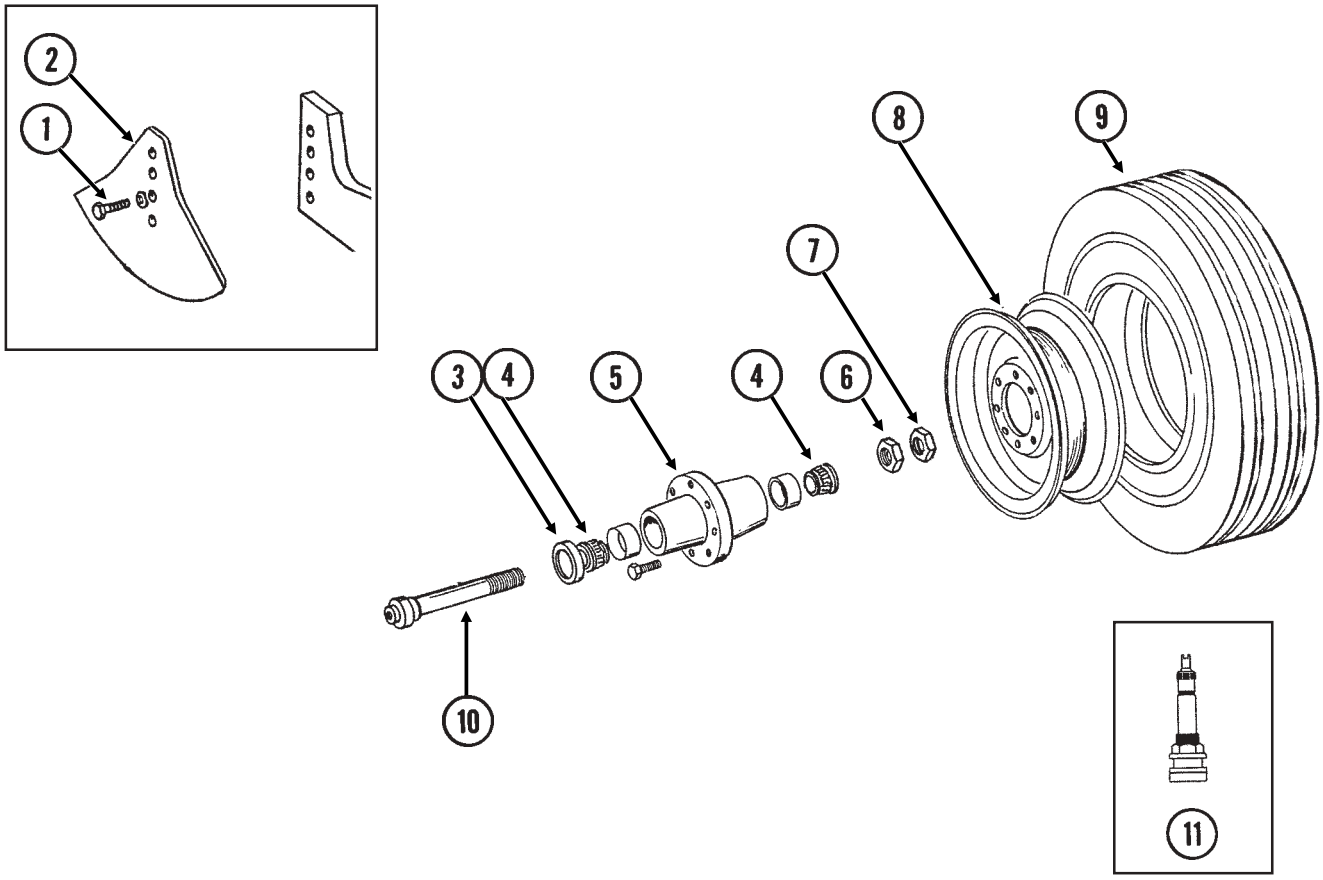


AXLE ASSEMBLY

ITEM	PART NO.	QTY.	DESCRIPTION
1.		-	See “Center Pivot”, Pages P52 And P53
2.		-	See “Rotation Cylinder”, Page P77
3.		-	See “Hydraulic Hoses And Fittings On Hitch”, Pages P96 And P97
4.	GD10064	1	Pin, 1 1/4" x 5 1/4"
	G10460	2	Cotter Pin, 1/4" x 2"
5.	GA9491	1	Center Post Mount
6.	G10479	6	Hex Head Cap Screw, 1"-14 x 3"
	GD10231	6	Special Washer, 1 1/16" I.D. x 2" O.D.
	G10155	6	Hex Nut, 1"-14
7.	G10097	4	Hex Head Cap Screw, 3/4"-16 x 2 1/2"
	GD2169	4	Special Washer, 25/32" I.D. x 1 1/4" O.D., Hardened
	G10098	4	Hex Nut, 3/4"-16
8.	G10017	2	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
9.	GD13337	1	Bulkhead Plate
10.	G10028	8	Hex Head Cap Screw, 3/4"-10 x 3"
	G10231	8	Lock Washer, 3/4"
	G10105	8	Hex Nut, 3/4"-10
11.	GA9093	1	Roller Guide, L.H. (Shown)
	GA9094	-	Roller Guide, R.H.
12.	A8995	-	Axle W/Stub **(Non-Stock Item)**
13.	G11039	7	Hex Head Cap Screw, 3/4"-16 x 3 1/4", Grade 8
	GD2169	7	Special Washer, 25/32" I.D. x 1 1/4" O.D., Hardened
	G10098	7	Hex Nut, 3/4"-16
14.	GD13332	1	Plate
15.	GA9488	1	Steps
16.	G11013	7-9	Hex Head Cap Screw, 1"-14 x 11 1/2"
	GD10231	7-9	Special Washer, 1 1/16" I.D. x 2" O.D.
	G10155	7-9	Hex Nut, 1"-14
17.	GD13328	4	Scraper
18.	G10039	8	Hex Head Cap Screw, 1/2"-13 x 1 3/4"
	G10228	8	Lock Washer, 1/2"
19.	G10019	8	Hex Head Cap Screw, 5/16"-18 x 1"
	G10232	8	Lock Washer, 5/16"
20.	GD13331	4	Hinged Step
21.	G10338	8	Carriage Bolt, 5/16"-18 x 1 1/4"
	G10232	8	Lock Washer, 5/16"
	G10106	8	Hex Nut, 5/16"-18
22.	GD13329	4	Hinge
23.	GD13568	3-2	Stud, 1"-14 x 12"
	GD10231	6-4	Special Washer, 1 1/16" I.D. x 2" O.D.
	G10155	3-2	Hex Nut, 1"-14
24.	GD11751	1	Steel Bushing, 1" Wide
25.	GD14091	-	Shim, 1 1/4" x 9 3/8", 14 Gauge
	GD14092	-	Shim, 1 1/4" x 9 3/8", 10 Gauge
26.	GD14073	1	Bulkhead Plate
27.	GA9849	1	Center Post Mount
28.	G10014	2	Hex Head Cap Screw, 1/2"-13 x 1"
	G10228	2	Lock Washer, 1/2"
29.	GD14077	1	Plate

TRANSPORT WHEELS/ROCK GUARDS

(TWL198a)



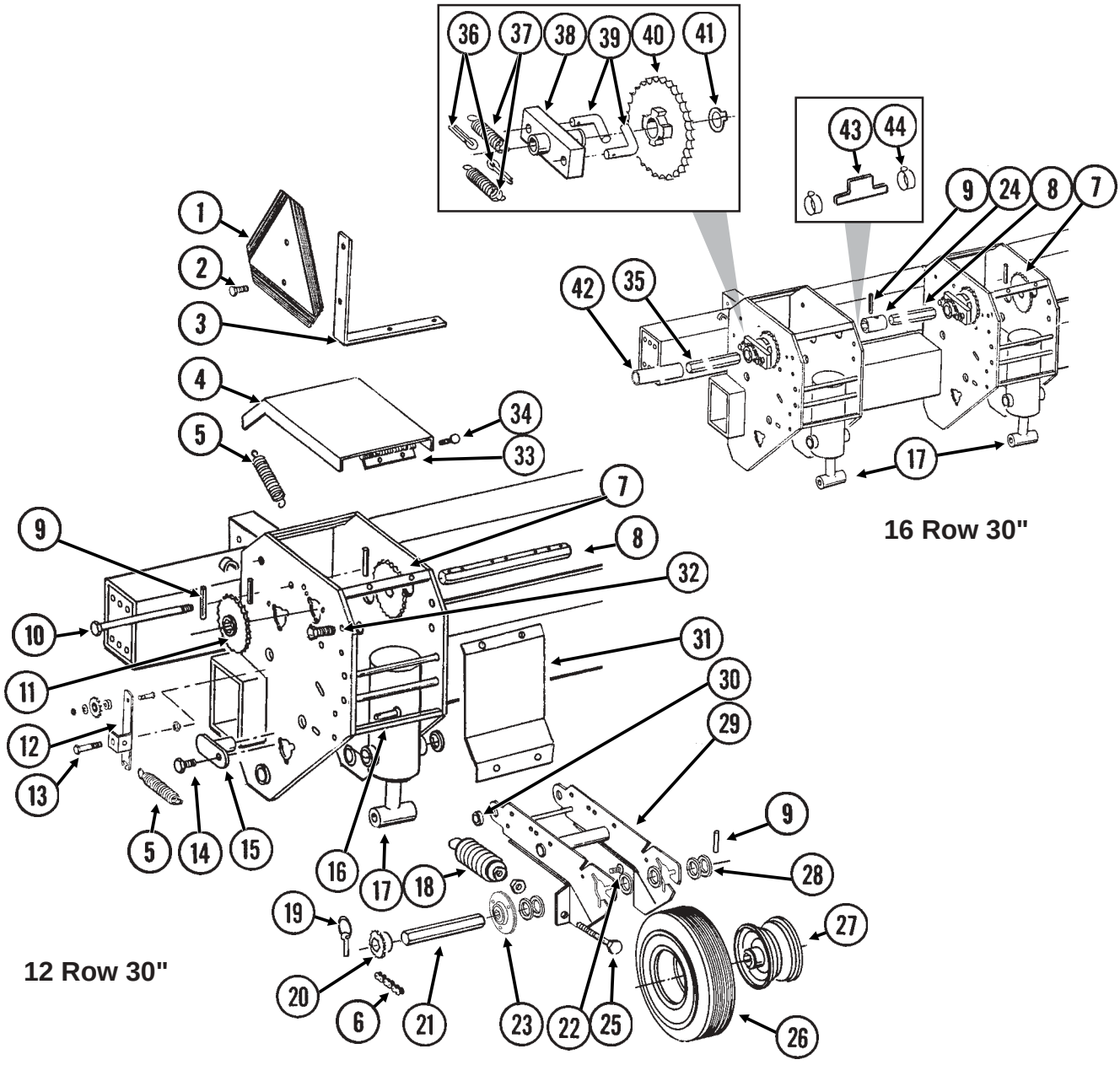
TRANSPORT WHEELS/ROCK GUARDS

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.	GA9198	-	Rock Guard (Optional)
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"-18 x 2 1/4"
	GR0531	-	Nut, 5/8"-18 UNF
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"
9.	GD13409	-	Tire, 255-70R 22.5" W/O Center Rib (Specify Brand*)
10.	GA4727	1	Spindle W/Retaining Ring, 1 3/4"
	G10913	-	External Retaining Ring, 2 1/2"
11.	GA7434	-	Valve Stem
A.	GA9545	-	Tire And Rim Assembly (Items 8, 9 And 11) (Specify Brand*)

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

CONTACT DRIVE WHEEL AND DRIVE SHAFT(S)

PTD057/PFA046/PTD075/PLA033(TWL11m)



CONTACT DRIVE WHEEL AND DRIVE SHAFT(S)

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GD2199	1	SMV Sign
2.	G10022	2	Hex Head Cap Screw, 1/4"-20 x 1/2"
	G10227	2	Lock Washer, 1/4"
	G10103	2	Hex Nut, 1/4"-20
3.	GD9969	1	Bracket
4.	GD10298	1	Cover
5.	GD5857	2	Spring
6.	G3310-110	1	Chain, No. 40, 110 Pitch Including Connector Link, Half Rate (2 To 1) Drive
	G3310-118	-	Chain, No. 40, 118 Pitch Including Connector Link
	GR0912	-	Connector Link, No. 40
7.		-	See “Inner Module Drive”, Pages P64 And P65
8.		-	See “Point Row Clutch”, Pages P66 And P67
9.	G10602	4	Spring Pin, 1/4" x 1 1/2"
10.	G10595	-	Hex Head Cap Screw, 3/8"-16 x 10" (Used To Secure Point Row Clutch)
	G10108	-	Lock Nut, 3/8"-16
11.	GA5114	1	Sprocket, 30 Tooth
12.	GA9553	1	Idler W/Sprocket And Hardware, L.H.
	GA9554	1	Idler W/Sprocket And Hardware, R.H. (Shown)
	GA7154	-	Sprocket W/Bearing, 18 Tooth
	G10017	-	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10128	-	Machine Bushing, 1/2", 14 Gauge
	G10501	-	Hex Jam Nut, 1/2"-13, Grade 2
13.	G10036	1	Hex Head Cap Screw, 5/8"-11 x 4"
	G10918	3	Machine Bushing, 5/8", 14 Gauge
	G10104	1	Hex Nut, 5/8"-11
	G10107	1	Lock Nut, 5/8"-11
14.	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"-13
15.	GA5121	2	Pin
16.	G10870	2	Clevis Pin, 3/8" x 1"
	G10860	2	Retaining Ring, 3/8"
17.		-	See “Wing Lift Cylinder”, Page P80
18.	GA2068	2	Spring W/Plug
19.	GD2558	1	Lynch Pin, 1/4"
20.	GA5114	1	Sprocket, 30 Tooth
	GA5105	-	Sprocket, 15 Tooth, Half Rate (2 To 1) Drive
21.	GD6775	1	Hex Shaft, 7/8" x 11 3/4" (2 Holes)
22.	G10303	6	Carriage Bolt, 5/16"-18 x 1"
	G10232	6	Lock Washer, 5/16"
	G10106	6	Hex Nut, 5/16"-18
23.	GA9846	-	Flanged Bearing, 7/8" Hex Bore
24.	GD5212	1	Coupler, 1 3/4", 16 Row 30" Only
25.	G10890	2	Hex Head Adjusting Bolt, 1/2"-13 x 4", Grade 2
	G10501	2	Hex Jam Nut, 1/2"-13, Grade 2
26.	GD4700	1	Tire, 4.80" x 8", 4 Ply, Rib Implement (Specify Brand*)
	GD4701	-	Valve Stem
27.	GA3553	1	Rim, 3.75" x 8"
28.	G10233	-	Machine Bushing, 1", 10 Gauge

(Continued)

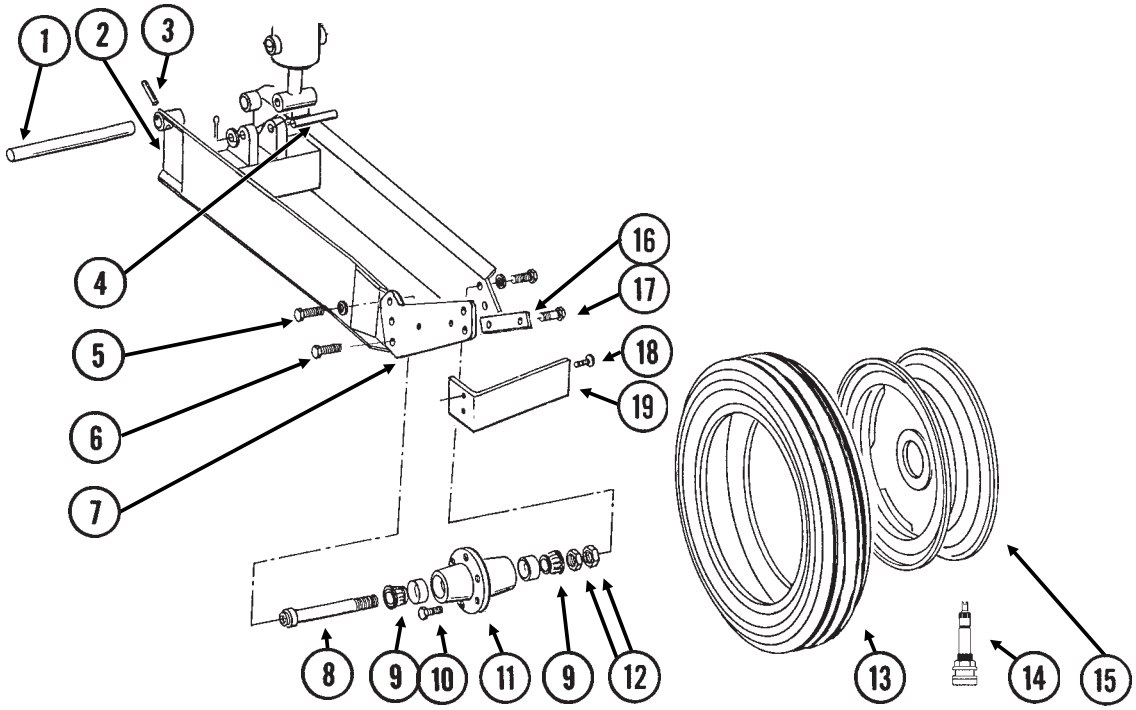
CONTACT DRIVE WHEEL AND DRIVE SHAFT(S)

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
(Continued)			
29.	GA7372	1	Wheel Arm
30.	GB0218	2	Bushing, 21/32" I.D. x 7/8" O.D. x 19/32" Long
31.	GD6895	1	Shield
32.	G10005	2	Hex Head Cap Screw, 5/8"-11 x 1 3/4"
	G10235	4	Machine Bushing, 7/8", 14 Gauge
	GD7805	2	Special Washer, 5/8", Hardened
	G10205	2	Washer, 5/8" SAE
	G10107	2	Lock Nut, 5/8"-11
33.	GD5789	1	Hinge, Female
	GD5790	1	Hinge W/Pins, Male
34.	G10064	6	Hex Head Cap Screw, 1/4"-20 x 1"
	G10209	4	Washer, 1/4" USS
	G10227	6	Lock Washer, 1/4"
	G10103	6	Hex Nut, 1/4"-20
35.	GD10099	-	Hex Shaft, 7/8" x 29 5/8"
36.	G10464	2	Cotter Pin, 3/16" x 1"
37.	GD1256	2	Spring
38.	GA0378	1	Block And Hub Assembly
39.	GD1255	2	L-Pin
40.	GA5165	1	Sprocket, 30 Tooth
41.	G10430	1	External Retaining Ring, 1 1/4"
42.	GD13652	1	Pipe, 1" x 23 1/4"
43.	GD14115	1	Catch
44.	G10278	2	Hose Clamp, No. 16
A.	GA3552	-	Tire And Rim Assembly (Items 26 And 27) (Specify Brand*)
B.	GA9843	-	Ratchet/Sprocket Assembly (L.H. Side Of Planter) (Items 36-41)
	GA5164	-	Ratchet/Sprocket Assembly (R.H. Side Of Planter)
C.	G1K324	-	Contact Wheel Arm Replacement Kit (Items 9, 21, 22, 23, 25, 28 And 29)

*** Specific brand requests will be supplied only as available from current KINZE® 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 could result in rate changes. To maintain consistent planting rates throughout all rows, it is recommended that all contact tires be of the same brand and be equally inflated.**

GROUND DRIVE WHEEL

PTD057(TWL142b)



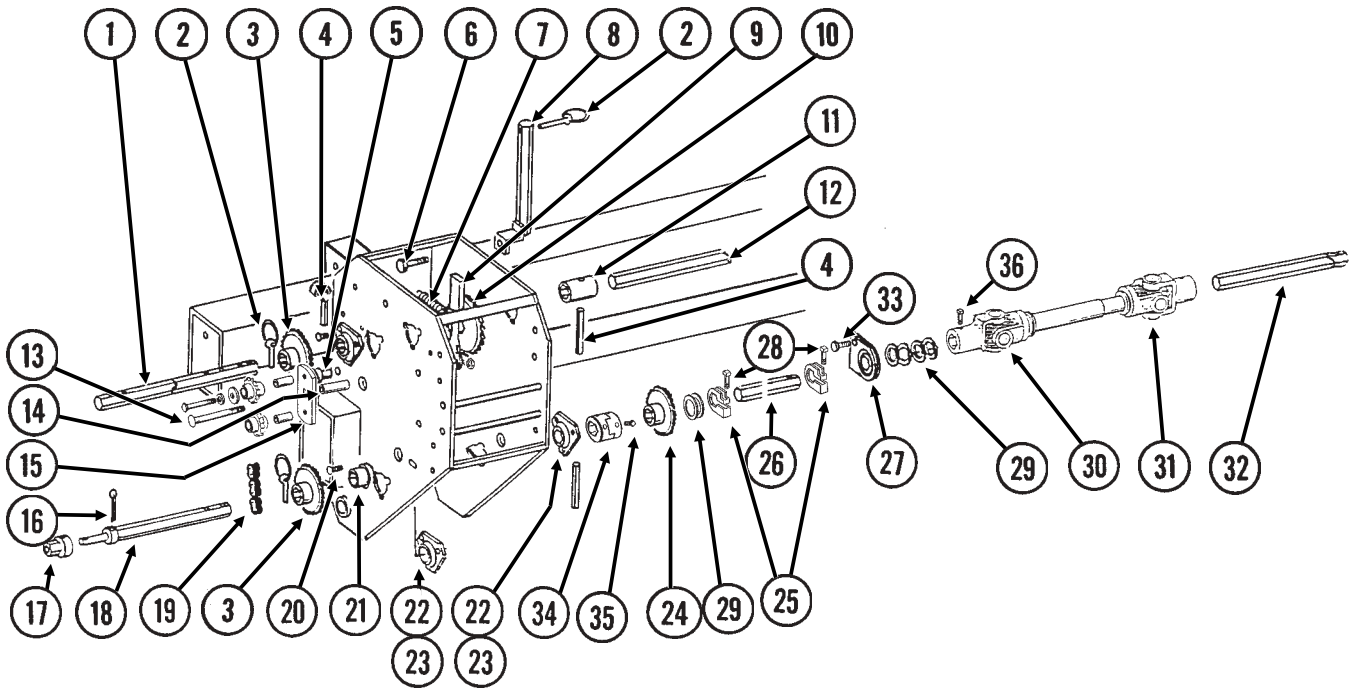
ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GD11695	-	Pin, 1 1/4" x 13 1/4"
2.	GA8677	1	Wheel Module
3.	G10610	-	Spring Pin, 3/8" x 2"
4.	GD5841	1	Pin, 1 1/4" x 5 5/8"
	G10226	2	Washer, 1 1/4" SAE
	G10460	2	Cotter Pin, 1/4" x 2"
5.	G10026	2	Hex Head Cap Screw, 3/4"-10 x 2"
	G10231	2	Lock Washer, 3/4"
6.	G10026	2	Hex Head Cap Screw, 3/4"-10 x 2"
	G10231	2	Lock Washer, 3/4"
	G10105	2	Hex Nut, 3/4"-10
7.	GD10128	1	Scraper Arm
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.	G10087	2	Hex Jam Nut, 1 1/2"-12, Grade 2
13.	GD10795	1	Tire, 7.50" x 20", 6 Ply, Tubeless W/O Center Rib (Specify Brand*) **(Sub GD13401)**
14.	GA7434	-	Valve Stem
15.	GA2908	1	Rim, 5.5" x 20"
16.	GD10144	1	Bar Clamp
17.	G10039	2	Hex Head Cap Screw, 1/2"-13 x 1 3/4"
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
18.	G10636	2	Carriage Bolt, 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"-13
19.	GD12543	1	Scraper
A.	GA7997	-	Tire And Rim Assembly (Specify Brand*)(Items 13-15)

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

TRANSMISSION AND ROW UNIT DRILL SHAFTS

PTD056/PTD065/PTD076/PTD079(TWL14e)

12 Row 30" Shown



ITEM	PART NO.	QTY. (Per Side)	DESCRIPTION
1.	GD6780	1	Shaft, 7/8" x 15"
2.	GD2558	3	Lynch Pin, 1/4"
3.	GA5106	1	Sprocket, 17 Tooth
	GA5107	1	Sprocket, 19 Tooth
	GA5108	2	Sprocket, 23 Tooth
	GA5109	1	Sprocket, 24 Tooth
	GA5110	1	Sprocket, 25 Tooth
	GA5111	1	Sprocket, 26 Tooth
	GA5112	1	Sprocket, 27 Tooth
	GA5113	1	Sprocket, 28 Tooth
4.	G10602	-	Spring Pin, 1/4" x 1 1/2"
5.	G10870	1	Clevis Pin, 3/8" x 1"
	G10860	1	Retaining Ring, 3/8"
6.	G10016	1	Hex Head Cap Screw, 1/2"-13 x 2"
	GD10356	1	Bushing, 3/4" Long (If Applicable)
	G10228	1	Lock Washer, 1/2"
	G10527	2	Lock Washer, 1/2", Internal/External
	G10102	1	Hex Nut, 1/2"-13
7.	GD5857	1	Spring
8.	GA4630	1	Sprocket Storage Rod
9.	GA4235	1	Ratchet Arm W/Protective Closure
	G10445	-	Protective Closure
10.		-	See “Inner Module Drive”, Pages P64 And P65
11.	GD5212	1	Coupler, 1 3/4", 16 Row 30" Only
12.	GD10100	1	Hex Shaft, 7/8" x 31 3/8", 16 Row 30" Only
13.	G10314	1	Carriage Bolt, 1/2"-13 x 3"
	G10111	1	Lock Nut, 1/2"-13
14.	GD3180-05	1	Sleeve, 5/8" I.D. x 7/8" O.D. x 1 3/16" Long

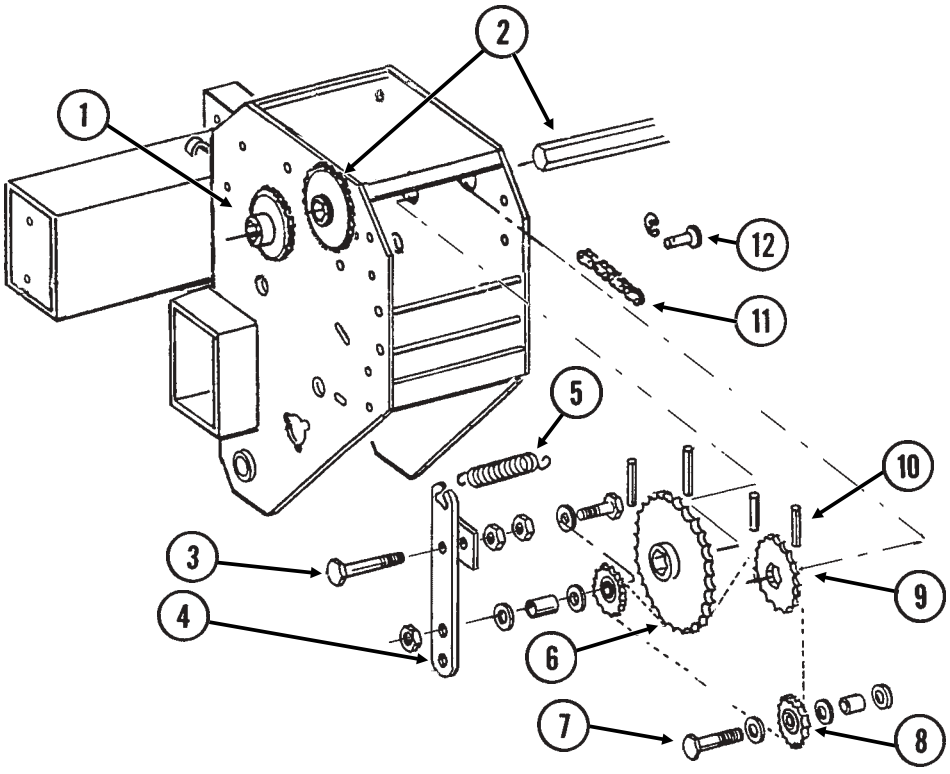
TRANSMISSION AND ROW UNIT DRILL SHAFTS

ITEM	PART NO.	QTY. (Per Side)	DESCRIPTION
15.	GA7336	1	Idler W/Bolt-On Sprockets
	GD7426	-	Sprocket, 12 Tooth
	GD1026	-	Sleeve, 1 3/16" Long
	G10210	-	Washer, 3/8" USS
	G10229	-	Lock Washer, 3/8"
	G10047	-	Hex Head Cap Screw, 3/8"-16 x 1 3/4"
16.	G10462	-	Cotter Pin, 3/16" x 2"
17.	GD7127	1	Shear Coupler
18.	GD7612	1	Shaft, 7/8" x 13 1/2"
19.	G3310-80	1	Chain, No. 40, 80 Pitch Including Connector Link
	GR0912	-	Connector Link, No. 40
20.	G10303	-	Carriage Bolt, 5/16"-18 x 1"
	G10232	-	Lock Washer, 5/16"
	G10106	-	Hex Nut, 5/16"-18
21.	GA5548	1	Special Bearing
22.	G3400-01	-	Flangette
23.	G2100-03	-	Bearing, 7/8" Hex Bore, Spherical
24.	GA5107	1	Sprocket, 19 Tooth, Interplant® Drive
25.	GD11045	-	Lock Clamp
26.	GD0914-106.5	2	Hex Shaft, 7/8" x 106 1/2" (No Holes), Wing, 12 Row 30"
	GD0914-166.75	-	Hex Shaft, 7/8" x 166 3/4" (No Holes), Wing, 16 Row 30"
27.	GA2180	-	Hanger Bearing, 7/8" Hex Bore
28.	G10130	-	Square Head Machine Bolt, 5/16"-18 x 1 3/4"
	G10923	-	Flange Nut, 5/16"-18, No Serration
29.	G10233	-	Machine Bushing, 1", 10 Gauge
30.	GA7052	-	U-Joint W/Grease Fitting, Female, 10 1/4" Long
	GR1557	-	Grease Fitting, 45°, Metric
	GR1297	-	Inboard Yoke And Outer Profile
	GR1294	-	Cross And Bearing Kit
	GR1293	-	Yoke, 7/8" Hex
31.	GA7051	-	U-Joint W/Grease Fitting, Male, 12 1/4" 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, 7/8" Hex
32.	GD0914-45	1	Hex Shaft, 7/8" x 45", R.H. Main Frame (No Holes)
	GD0914-35	-	Hex Shaft, 7/8" x 35", L.H. Main Frame (No Holes)
33.	G10004	2	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
	G10229	2	Lock Washer, 3/8"
	G10101	-	Hex Nut, 3/8"-16
34.	GB0287	2	Coupler
35.	G10131	4	Square Head Set Screw, 5/16"-18 x 3/4"
36.	G10688	-	Square Head Set Screw, 3/8"-16 x 5/8"
A.	G1K269	-	Lock Clamp Kit (Items 25 And 28)

INNER MODULE DRIVE

PTD058/PFA046/PTD077(TWL16b)

12 Row 30" Shown
(Located In Inside Module On 16 Row 30")

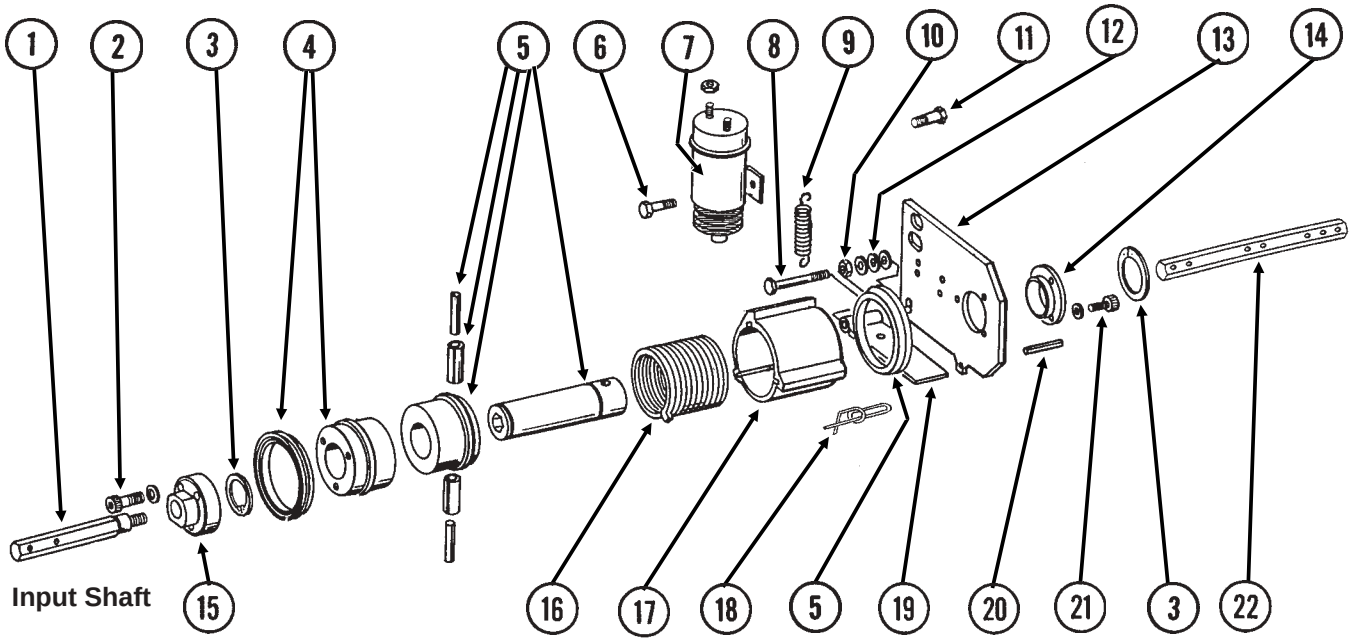


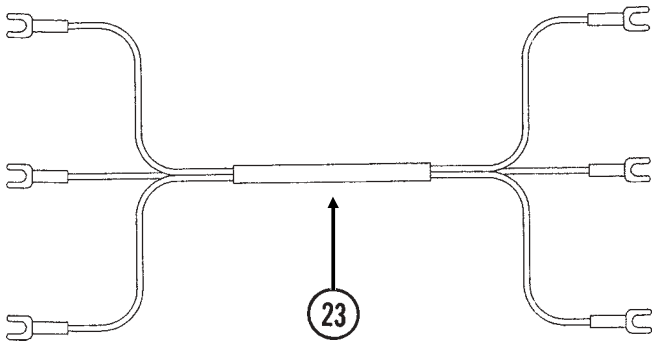
INNER MODULE DRIVE

ITEM	PART NO.	QTY. (Per Module)	DESCRIPTION
1.		-	See “Transmission And Row Unit Drill Shafts”, Pages P62 And P63
2.		-	See “Contact Drive Wheel And Drive Shaft(s)”, Pages P58-P60
3.	G10743	1	Hex Head Cap Screw, 5/8"-11 x 3 3/4"
	G10104	1	Hex Nut, 5/8"-11
	G10107	1	Lock Nut, 5/8"-11
4.	GA9557	1	Idler W/Sprocket And Hardware, L.H.
	GA9558	-	Idler W/Sprocket And Hardware, R.H. (Shown)
	GA7154	-	Sprocket W/Bearing, 18 Tooth
	G10038	-	Hex Head Cap Screw, 1/2"-13 x 3"
	GD10007	-	Spacer, 1 1/8"
	G10206	-	Washer, 1/2" SAE
	G10111	-	Lock Nut, 1/2"-13
5.	GD5857	1	Spring
6.	GA5194	1	Sprocket, 50 Tooth
7.	G10581	1	Hex Head Cap Screw, 1/2"-13 x 2 1/4"
	GD7889	1	Bushing
	G10168	2	Machine Bushing, 1/2", 7 Gauge
	G10205	2	Washer, 5/8" SAE
	G10111	1	Lock Nut, 1/2"-13
8.	GA7154	1	Sprocket W/Bearing, 18 Tooth
9.	GA5113	1	Sprocket, 28 Tooth
10.	G10602	-	Spring Pin, 1/4" x 1 1/2"
11.	G3310-100	1	Chain, No. 40, 100 Pitch Including Connector Link
	GR0912	-	Connector Link, No. 40
12.	G10870	1	Clevis Pin, 3/8" x 1"
	G10860	1	Retaining Ring, 3/8"

POINT ROW CLUTCH

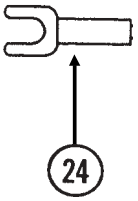
PRC019(TWL144a/TWL71d)





Connects To Clutch Solenoid

Connects To Planter Harness At Valve Block On Rear Center Frame

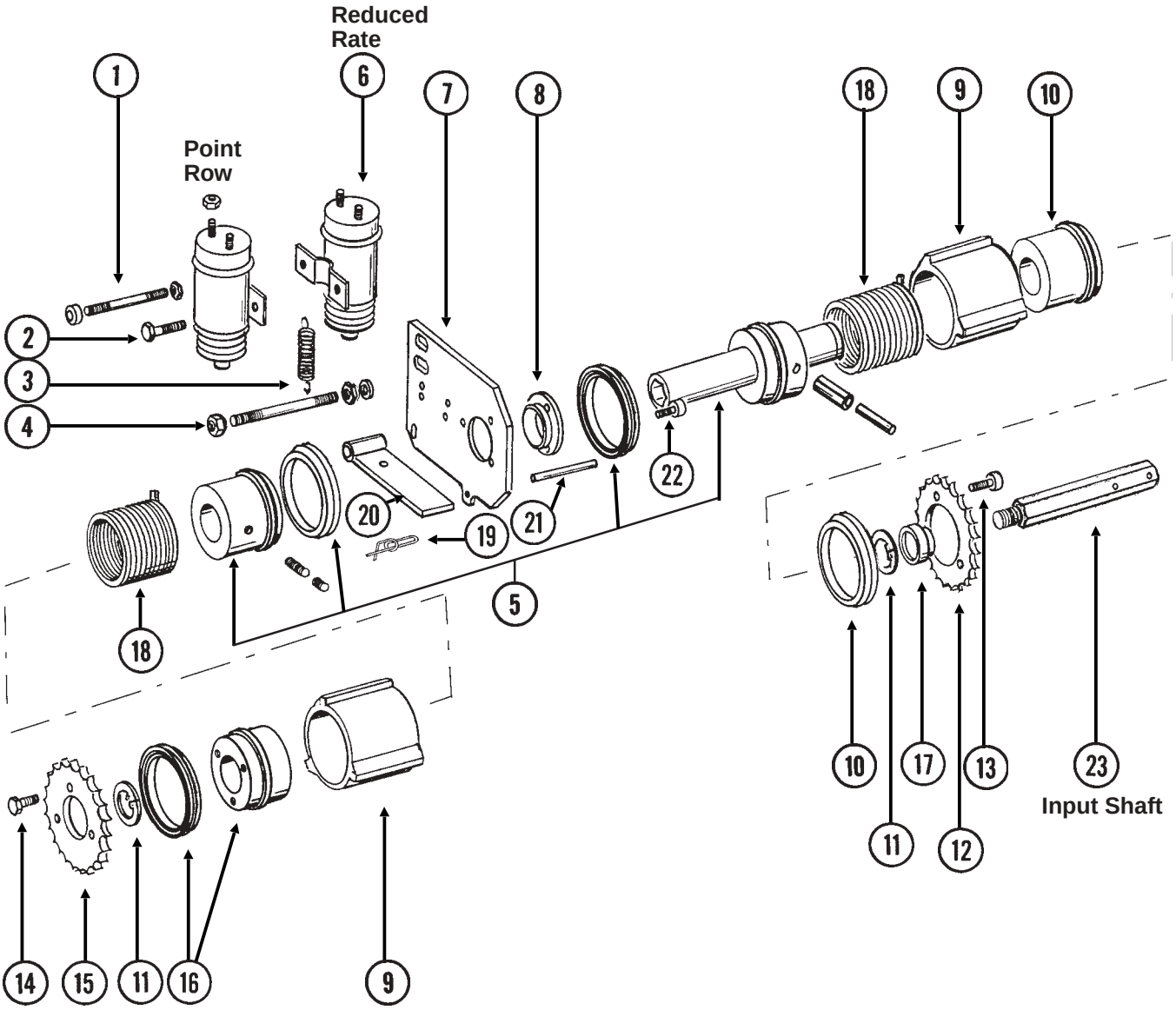


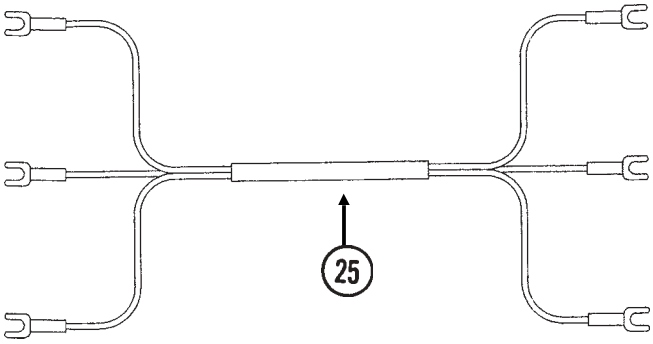
POINT ROW CLUTCH

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GD10069	1	Input Shaft, L.H. Thread (R.H. Side Of Machine)
	GD10068	-	Input Shaft, R.H. Thread (L.H. Side Of Machine)
2.	G10374	3	Hex Socket Head Screw, 1/4"-20 x 1"
	G10227	3	Lock Washer, 1/4"
3.	G10496	2	External Inverted Snap Ring, 1 1/2"
4.	GA9568	1	Input Hub W/Seal
	GD10120	-	Seal
5.	GA7137	1	Hub/Sleeve Assembly W/Seal And Spring Pins
	GD10120	-	Seal
	G10765	-	Spring Pin, 1/4" x 1"
	G10804	-	Spring Pin, 5/32" x 7/8"
6.	G10023	1	Hex Head Cap Screw, 1/4"-20 x 3/4"
	G10227	1	Lock Washer, 1/4"
	G10103	1	Hex Nut, 1/4"-20
7.	GA8393	1	Solenoid Complete
	GR1306	1	Snap Ring
	GR1303	1	Spring
	GR1304	1	Boot
	GR1305	1	Plunger
8.	G10049	1	Hex Head Cap Screw, 3/8"-16 x 2 1/2"
	G10229	2	Lock Washer, 3/8"
	G10497	1	Hex Jam Nut, 3/8"-16
9.	GD10123	1	Spring
10.	G10101	1	Hex Nut, 3/8"-16
11.	G10900	1	Socket Head Cap Screw, 1/4"-20 x 1 3/4"
	G10227	1	Lock Washer, 1/4"
	G10103	2	Hex Nut, 1/4"-20
12.	G10203	1	Washer, 3/8" SAE
13.	GD10103	1	Mounting Plate
14.	GD9667	1	Bushing
15.	GD10071	1	Coupler W/L.H. Threads (R.H. Side Of Machine)
	GD10070	1	Coupler W/R.H. Threads (L.H. Side Of Machine)
16.	GD9672	1	Spring, R.H. (R.H. Side Of Machine)
	GD9671	-	Spring, L.H. (L.H. Side Of Machine)
17.	GD10102	1	Stop Collar
18.	GD11120	1	Rue Ring Cotter, 5/16"
19.	GD10510	1	Actuator Arm
20.	G10859	1	Spring Pin, 3/16" x 2 1/4"
21.	G10253	3	Socket Head Screw, No. 10-32 x 1/2"
	G10257	3	Lock Washer, No. 10
22.	GD10543	-	Hex Shaft, 7/8" x 13"
23.	GA9479	1	Wiring Harness, 228", R.H. Side, 12 Row 30"
	GA9480	-	Wiring Harness, 264", L.H. Side, 12 Row 30"
	GA9483	-	Wiring Harness, 252", R.H. Side, 16 Row 30"
	GA9482	-	Wiring Harness, 300", L.H. Side, 16 Row 30"
24.	G10996	-	Fork Terminal
A.	GA7110	-	Point Row Clutch Assembly, R.H. (R.H. Side Of Machine) (Items 1-21)
	GA7111	-	Point Row Clutch Assembly, L.H. (L.H. Side Of Machine) (Items 1-21)

TWO-SPEED POINT ROW CLUTCH

PRC023(TWL145/A7274/TWL71d/TWL18)



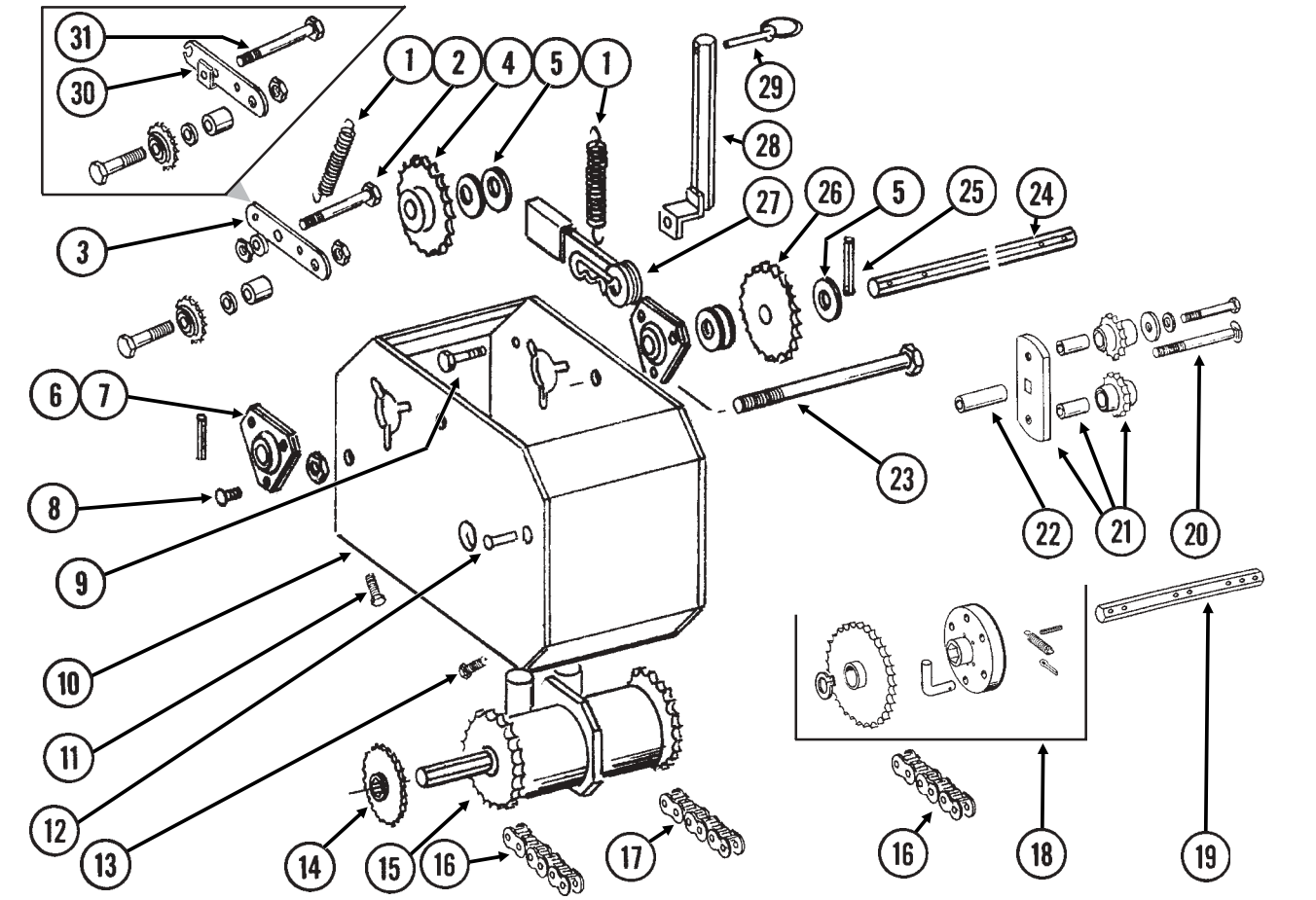
Jumper Wire Between Clutch Solenoids  24	**Connects To Planter Harness At Valve Block On Rear Center Frame** — **Connects To Clutch Solenoids**  25	 26

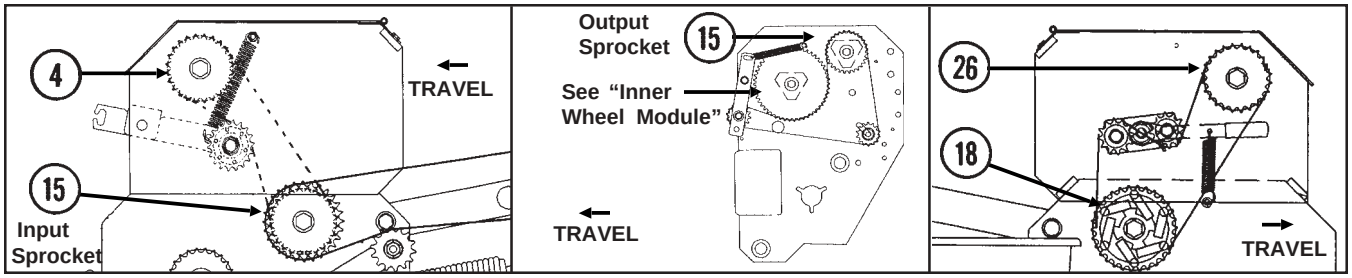
TWO-SPEED POINT ROW CLUTCH

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GD10635	1	Threaded Rod, 1/4"-20 x 3 1/2"
	G10103	2	Hex Nut, 1/4"-20
	G10227	2	Lock Washer, 1/4"
	GD10282	2	Allen Nut, 1/4"-20
2.	G10023	1	Hex Head Cap Screw, 1/4"-20 x 3/4"
	G10227	1	Lock Washer, 1/4"
	G10103	1	Hex Nut, 1/4"-20
3.	GD10123	2	Spring
4.	GD10636	1	Threaded Rod, 3/8"-16 x 4 1/4"
	G10108	2	Lock Nut, 3/8"-16
	G10229	2	Lock Washer, 3/8"
	G10101	2	Hex Nut, 3/8"-16
5.	GA7463	1	Hub/Sleeve Assembly W/Seals, Sleeve, Pins And Screws
	GD10120	-	Seal
	GD10584	-	Sleeve
	G10873	-	Hex Socket Set Screw, 5/16"-18 x 3/4"
	G10872	-	Hex Socket Set Screw, 5/16"-18 x 1/4"
	G10804	-	Spring Pin, 5/32" x 7/8"
	G10765	-	Spring Pin, 1/4" x 1"
6.	GA8393	2	Solenoid Complete
	GR1306	-	Snap Ring
	GR1303	-	Spring
	GR1304	-	Boot
	GR1305	-	Plunger
7.	GD10103	1	Mounting Plate
8.	GD10586	1	Bushing
9.	GD10585	2	Stop Collar
10.	GA9571	1	Hub W/Seal
	GD10120	-	Seal
11.	G10496	2	External Inverted Snap Ring, 1 1/2"
12.	GD10578	1	Input Sprocket, 28 Tooth
13.	G10374	3	Hex Socket Head Screw, 1/4"-20 x 1"
	GD10588	3	Key
14.	G10023	3	Hex Head Cap Screw, 1/4"-20 x 3/4"
	G10227	3	Lock Washer, 1/4"
15.	GD10579	1	Output Sprocket, 28 Tooth
16.	GA9572	1	Hub W/Seal
	GD10120	-	Seal
17.	GD10638	1	Coupler W/R.H. Threads
	GD10587	-	Coupler W/L.H. Threads
18.	GD9672	2	Spring, R.H. (R.H. Side Of Machine)
	GD9671	-	Spring, L.H. (L.H. Side Of Machine)
19.	GD11120	2	Rue Ring Cotter, 5/16"
20.	GD10510	2	Actuator Arm
21.	G10859	1	Spring Pin, 3/16" x 2 1/4"
22.	G10876	3	Hex Socket Head Screw, No. 10-32 x 1/4"
23.	GD10069	1	Input Shaft, L.H. Thread (R.H. Side Of Machine)
	GD10068	-	Input Shaft, R.H. Thread (L.H. Side Of Machine)
24.	GA7274	1	Jumper Wire (Between Solenoids)
25.	GA9479	1	Wiring Harness, 228", R.H. Side, 12 Row 30"
	GA9480	-	Wiring Harness, 264", L.H. Side, 12 Row 30"
	GA9483	-	Wiring Harness, 252", R.H. Side, 16 Row 30"
	GA9482	-	Wiring Harness, 300", L.H. Side, 16 Row 30"
26.	G10996	-	Fork Terminal

TWO-SPEED POINT ROW CLUTCH WHEEL MODULE EXTENSION

PRC022/PRC019/PTD078/PTD079(TWL77c/TWL84b/TWL79a/TWL80)





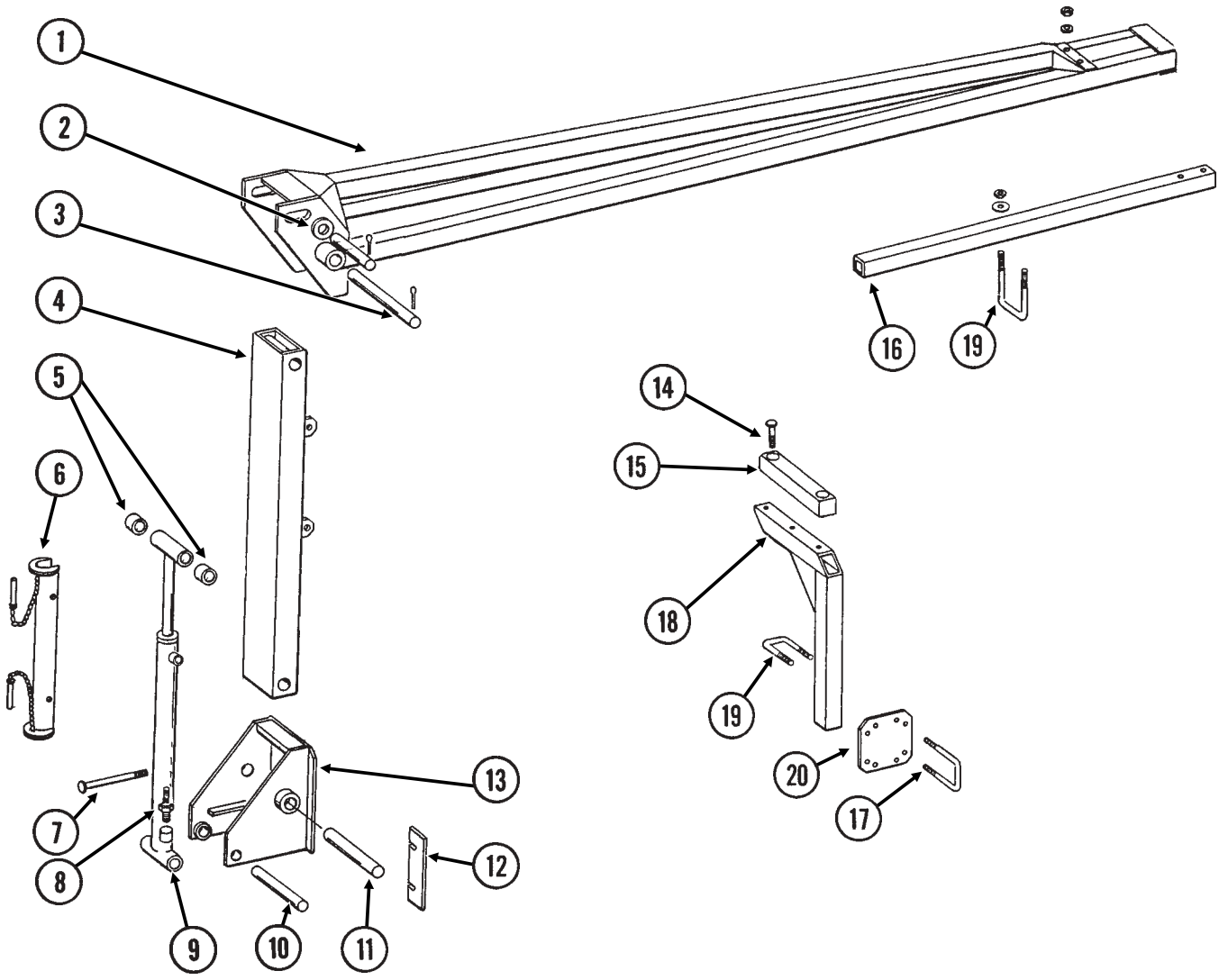
ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GD5857	2	Spring
2.	G10013	1	Hex Head Cap Screw, 5/8"-11 x 3 1/2"
	G10204	2	Special Machine Bushing, 5/8" x 1" O.D.
	G10107	1	Lock Nut, 5/8"-11
	G10104	1	Hex Nut, 5/8"-11
3.	GA7307	1	Idler W/Sprocket And Hardware
	GA7154	-	Sprocket W/Bearing, 18 Tooth
	G10053	-	Hex Head Cap Screw, 1/2"-13 x 2 1/2"
	GD10356	-	Bushing, 3/4" Long
	G10206	-	Washer, 1/2" SAE
	G10111	-	Lock Nut, 1/2"-13
4.	GA5113	1	Sprocket, 28 Tooth
5.	G10233	-	Machine Bushing, 1", 10 Gauge
6.	G3400-01	-	Flangette
7.	G2100-03	-	Bearing, 7/8" Hex Bore, Spherical
8.	G10312	6	Carriage Bolt, 5/16"-18 x 3/4"
	G10232	6	Lock Washer, 5/16"
	G10106	6	Hex Nut, 5/16"-18

TWO-SPEED POINT ROW CLUTCH WHEEL MODULE EXTENSION

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
9.	G10037	1	Hex Head Cap Screw, 1/2"-13 x 1 1/4"
	G10216	1	Washer, 1/2" USS
	G10228	1	Lock Washer, 1/2"
	G10102	1	Hex Nut, 1/2"-13
10.	GA7306	1	Extension Bracket
11.	G10857	2	Hex Head Cap Screw, 1/4"-20 x 1 1/4"
	G10209	2	Washer, 1/4" USS
	G10227	2	Lock Washer, 1/4"
	G10103	2	Hex Nut, 1/4"-20
12.	G10408	1	Clevis Pin, 5/16" x 3/4"
	G10409	1	Retaining Ring, 5/16"
13.	G10064	2	Hex Head Cap Screw, 1/4"-20 x 1"
	G10209	2	Washer, 1/4" USS
	G10227	2	Lock Washer, 1/4"
	G10103	2	Hex Nut, 1/4"-20
14.		-	See “Contact Drive Wheel And Drive Shaft(s)”, Pages P58-P60
15.		-	See “Two-Speed Point Row Clutch”, Pages P68 And P69
16.	G3310-74	2	Chain, No. 40, 74 Pitch Including Connector Link
	GR0912	-	Connector Link, No. 40
17.	G3310-100	1	Chain, No. 40, 100 Pitch Including Connector Link
	GR0912	-	Connector Link, No. 40
18.	GA7320	1	Overrunning Sprocket Assembly, R.H.
	GA7321	-	Overrunning Sprocket Assembly, L.H.
	G10430	1	External Retaining Ring, 1 1/4"
	GD1255	6	L-Pin
	G10546	6	Spring Pin, 3/16" x 1 1/4"
	G10470	6	Cotter Pin, 5/32" x 1"
	GD10366	6	Spring
	GA7317	1	Block
	GA7319	1	Sprocket W/Bushing, 30 Tooth
19.	GD10543	1	Hex Shaft, 7/8" x 13"
20.	G10863	1	Carriage Bolt, 1/2"-13 x 2 3/4"
	G10111	1	Lock Nut, 1/2"-13
21.	GA7336	1	Idler W/Bolt-On Sprockets
	GD7426	-	Sprocket, 12 Tooth
	GD1026	-	Sleeve, 1 3/16" Long
	G10210	-	Washer, 3/8" USS
	G10229	-	Lock Washer, 3/8"
	G10047	-	Hex Head Cap Screw, 3/8"-16 x 1 3/4"
22.	GD3180-18	1	Sleeve, 5/8" I.D. x 7/8" O.D. x 1 1/8" Long
23.	G10595	1	Hex Head Cap Screw, 3/8"-16 x 10"
	G10108	1	Lock Nut, 3/8"-16
24.	GD10355	1	Shaft, 7/8" x 13 3/4"
25.	G10602	3	Spring Pin, 1/4" x 1 1/2"
26.	GA5109	1	Sprocket, 24 Tooth
	GA5105	1	Sprocket, 15 Tooth
	GA5106	1	Sprocket, 17 Tooth
	GA5112	1	Sprocket, 27 Tooth
	GA5108	-	Sprocket, 23 Tooth (From Transmission)
	GA5110	-	Sprocket, 25 Tooth (From Transmission)
	GA5111	-	Sprocket, 26 Tooth (From Transmission)
27.	GA4235	1	Ratchet Arm W/Protective Closure
28.	GA7313	1	Sprocket Storage Rod
29.	GD2558	2	Lynch Pin, 1/4"
	G10445	-	Protective Closure
30.	GA9918	1	Idler Assembly W/Sprocket And Hardware
	GD10356	-	Bushing, 3/4" Long
	G10128	-	Machine Bushing, 1/2", 14 Gauge
	G10501	-	Hex Jam Nut, 1/2"-13, Grade 2
	G10053	-	Hex Head Cap Screw, 1/2"-1 x 2 1/2"
	GA7154	-	Sprocket W/Bearing, 18 Tooth
31.	G10743	1	Hex Head Cap Screw, 5/8"-11 x 3 3/4"
	G10107	1	Lock Nut, 5/8"-11
	G10104	1	Hex Nut, 5/8"-11

MARKER ASSEMBLY 12 ROW 30"

MKR019/MKR027(MKR14e)

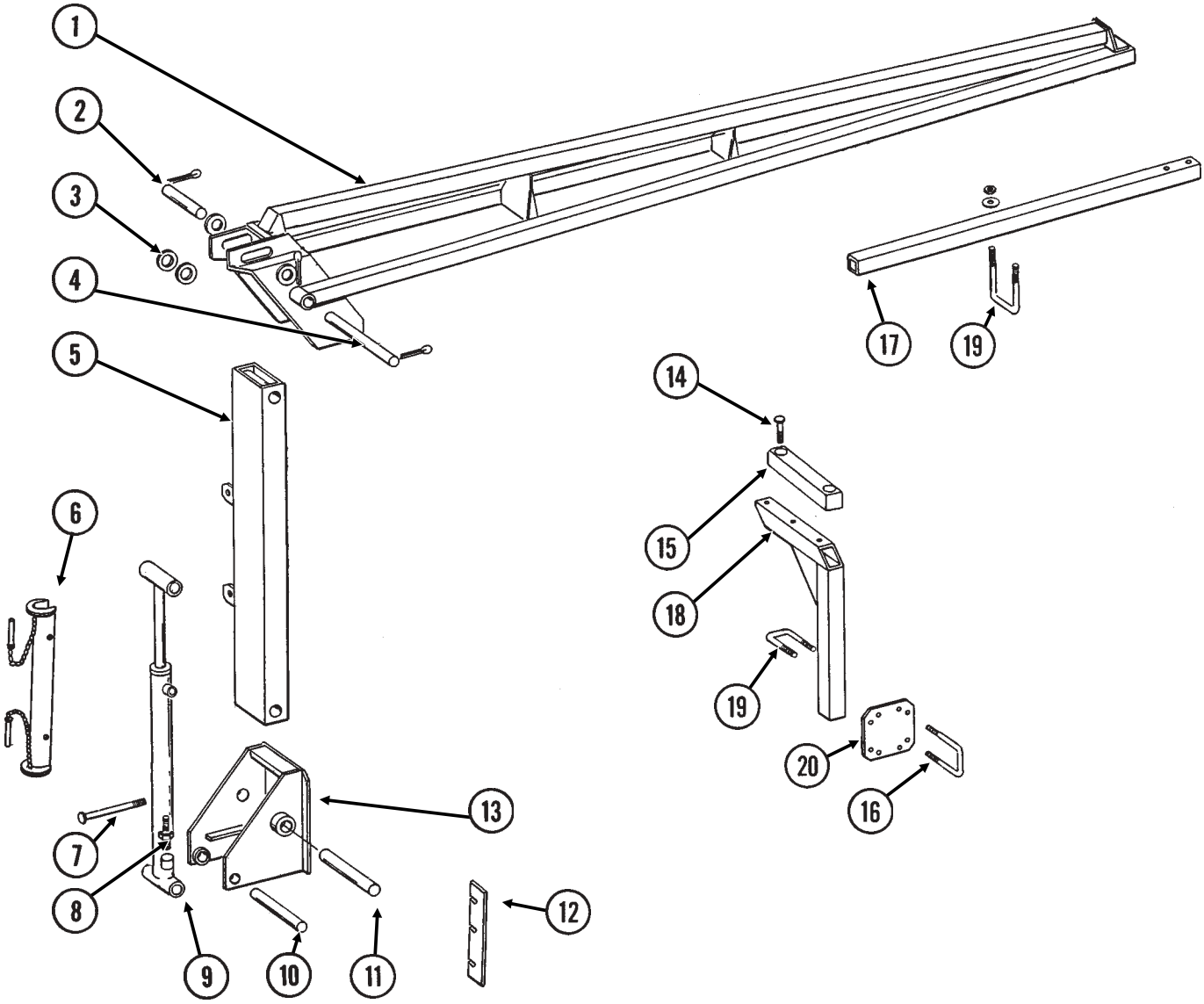


MARKER ASSEMBLY 12 ROW 30"

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GA4353	1	Arm W/Grease Fittings, Second Stage, 110"
	G10641	-	Grease Fitting, 1/8" NPT
2.	G10226	2	Washer, 1 1/4" SAE
3.	GD3214	1	Pin, 1 1/4" x 12 1/4"
	G10460	2	Cotter Pin, 1/4" x 2"
4.	GA4611	1	Arm W/Grease Fittings, First Stage
	G10641	-	Grease Fitting, 1/8" NPT
5.	GD0752-41	4	Sleeve, 1"
6.	GA8170	1	Safety Lockup W/Detent Pins, 19 3/8"
	G10536	-	Detent Pin, 1/2" x 2 1/2" Grip
7.	G10046	4	Hex Head Cap Screw, 5/8"-11 x 5"
	G10205	8	Washer, 5/8" SAE
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
8.		-	See “Hydraulic Hoses And Fittings On Planter Frame”, Pages P98-P101
9.		-	See “Marker Cylinder”, Page P87
10.	GD2161	2	Pin, 1 1/4" x 8 1/4"
	G10460	4	Cotter Pin, 1/4" x 2"
11.	GD0652	1	Pin, 1 1/4" x 9 1/2"
	G10460	2	Cotter Pin, 1/4" x 2"
12.	GD10792	-	Shim (As Required)
13.	GA5130	1	Mount
14.	G10017	2	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
15.	GA9088	1	Molded Stop, 12 1/4" Long
16.	GD0453-07	1	Extension Tube, 45"
17.	GD4743	2	U-Bolt, 3" x 3" x 1/2"-13
	G10228	4	Lock Washer, 1/2"
	G10102	4	Hex Nut, 1/2"-13
18.	GA7042	1	Stand, 20"
19.	GD2721	1	U-Bolt, 2" x 2" x 1/2"-13
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
20.	GD9981	1	Bar

MARKER ASSEMBLY 16 ROW 30"

MKR019/MKR023MKR027(MKR15d)

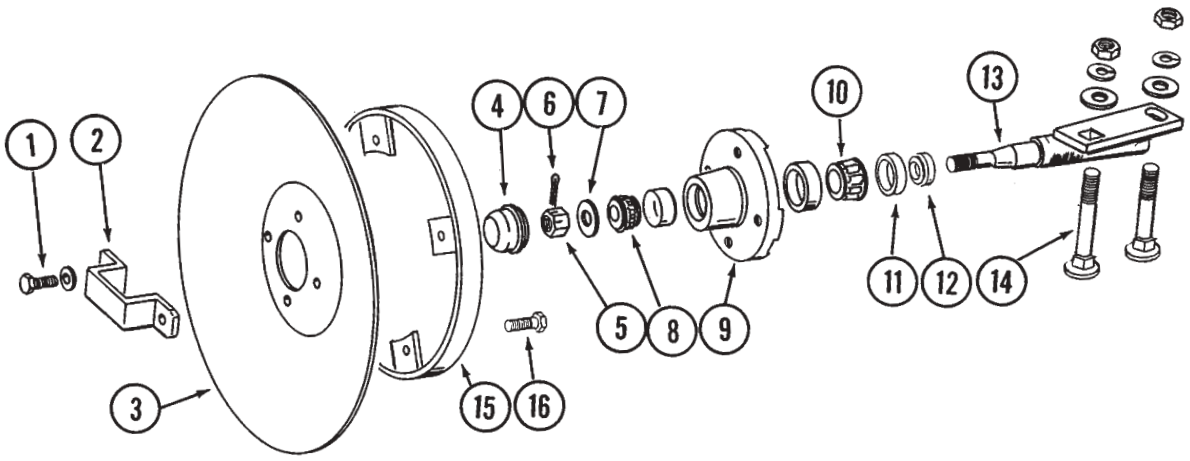


MARKER ASSEMBLY 16 ROW 30"

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GA7118	1	Arm, Second Stage, 172 1/4"
2.	GD1701	1	Pin, 1 1/4" x 6 1/2"
	G10460	2	Cotter Pin, 1/4" x 2"
3.	G10979	4	Special Washer, 1 1/4"
4.	GD0737	1	Pin, 1 1/4" x 13 1/4"
	G10460	2	Cotter Pin, 1/4" x 2"
5.	GA4878	1	Arm W/Grease Fittings, First Stage, R.H.
	GA4983	-	Arm W/Grease Fittings, First Stage, L.H.
	G10641	-	Grease Fitting, 1/8" NPT
6.	GA8170	1	Safety Lockup W/Detent Pins, 19 3/8"
	G10536	-	Detent Pin, 1/2" x 2 1/2" Grip
7.	G10068	-	Hex Head Cap Screw, 5/8"-11 x 6"
	G10205	6	Washer, 5/8" SAE
	G10230	6	Lock Washer, 5/8"
	G10104	6	Hex Nut, 5/8"-11
8.		-	See “Hydraulic Hoses And Fittings On Planter Frame”, Pages P98-P101
9.		-	See “Marker Cylinder”, Page P87
10.	GD0652	1	Pin, 1 1/4" x 9 1/2"
	G10460	2	Cotter Pin, 1/4" x 2"
11.	GD7209	1	Pin, 1 1/4" x 11 1/2"
	G10049	1	Hex Head Cap Screw, 3/8"-16 x 2 1/2"
	G10108	1	Lock Nut, 3/8"-16
12.	GD10793	-	Shim (As Required) (Shown)
	GD11791	-	Shim (As Required)
13.	GA4877	1	Mount
14.	G10017	2	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
15.	GA9088	1	Molded Stop, 12 1/4" Long
16.	GD4743	2	U-Bolt, 3" x 3" x 1/2"-13
	G10228	4	Lock Washer, 1/2"
	G10102	4	Hex Nut, 1/2"-13
17.	GD0453-03	1	Extension Tube, 50"
18.	GA7043	1	Stand, 30"
19.	GD2721	3	U-Bolt, 2" x 2" x 1/2"-13
	G10228	6	Lock Washer, 1/2"
	G10102	6	Hex Nut, 1/2"-13
20.	GD9981	1	Bar

MARKER SPINDLE/HUB/BLADE

MKR020(MKR4)

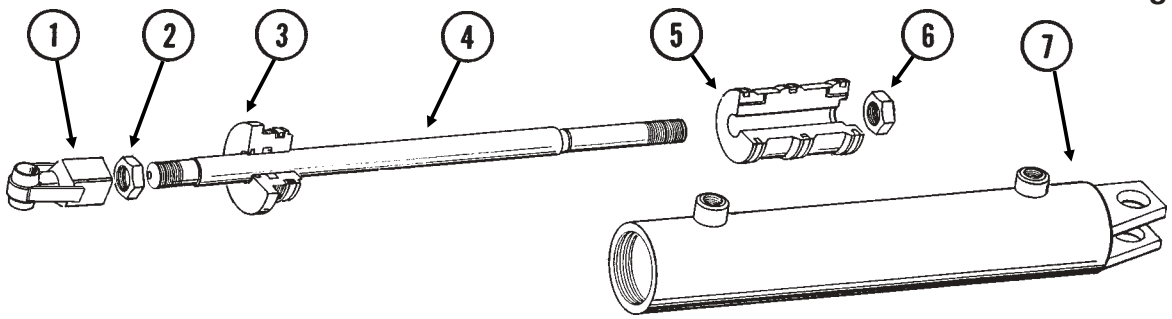


ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	G10722	4	Hex Head Cap Screw, 1/2"-20 x 1"
	G10228	4	Lock Washer, 1/2"
2.	GD2597	1	Retainer
3.	GD0746	1	Disc Blade, Solid, 16" (Shown)
	GD10283	-	Disc Blade, Notched, 16" (Optional)
4.	GD0840	1	Dust Cap
5.	G10725	1	Slotted Hex Nut, 5/8"-18
6.	G10544	1	Cotter Pin, 5/32" x 1"
7.	G10724	1	Washer, 5/8" SAE
8.	GA0257	1	Bearing
9.	GA0167	1	Hub W/Cups
	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, 1/2"-13 x 3 1/2"
	G10168	2	Machine Bushing, 1/2", 7 Gauge
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-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
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)

ROTATION CYLINDER, ALL SIZES

(CYL11d)

$^{3}/_{4}$"-16 O-Ring Ports

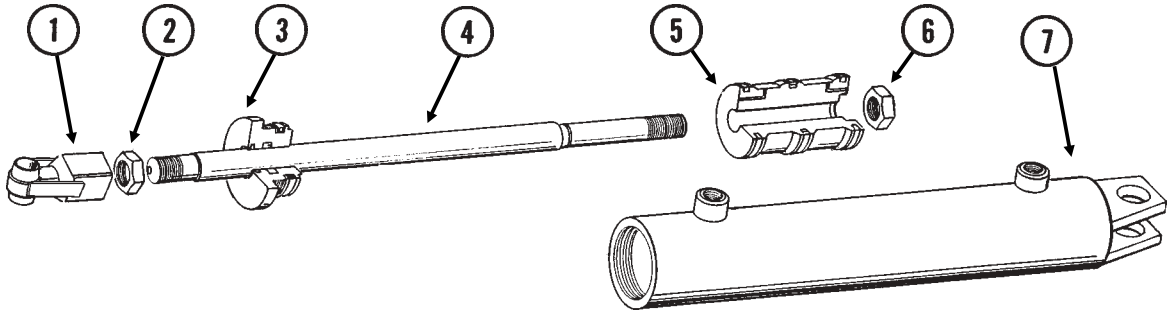


ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA9688	1	Clevis **(Sub GD14059 And GA7221)**
2.	G10509	1	Hex Jam Nut, 1 $^{1}/_{4}$"-12, Grade 2
3.	GD11988	1	Gland
4.	GD12667	1	Rod **(Sub GD14059 And GA7221)**
5.	GD11992	1	Piston
6.	G10972	1	Lock Nut, 1 $^{1}/_{4}$"-12
7.	A9018	1	Barrel **(Non-Stock Item)**
A.	GA9019	-	Cylinder Complete, 4" x 20" *(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

ROTATION CYLINDER, ALL SIZES

(CYL11d)

$^{3}/_{4}$"-16 O-Ring Ports

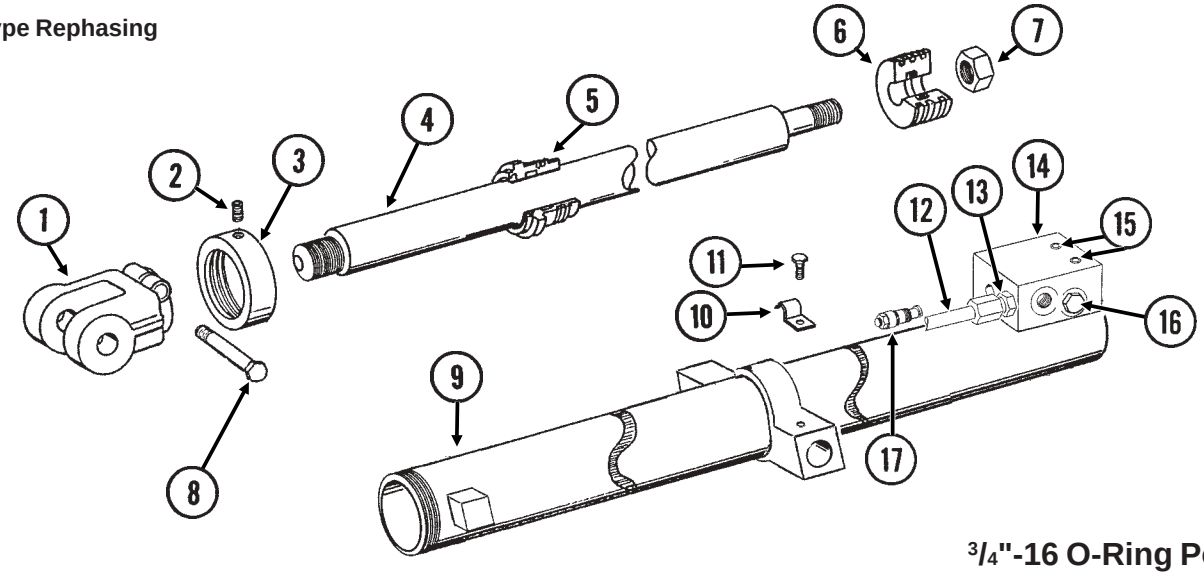


ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA7221	1	Clevis
2.	G10509	1	Hex Jam Nut, 1 $^{1}/_{4}$"-12, Grade 2
3.	GD11988	1	Gland
4.	GD14059	1	Rod
5.	GD11992	1	Piston
6.	G10972	1	Lock Nut, 1 $^{1}/_{4}$"-12
7.	A9018	1	Barrel **(Non-Stock Item)**
A.	GA9842	-	Cylinder Complete, 4" x 20" *(Part Number Stamped On 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, 12 ROW 30"

(CYL54c)

Port Type Rephasing



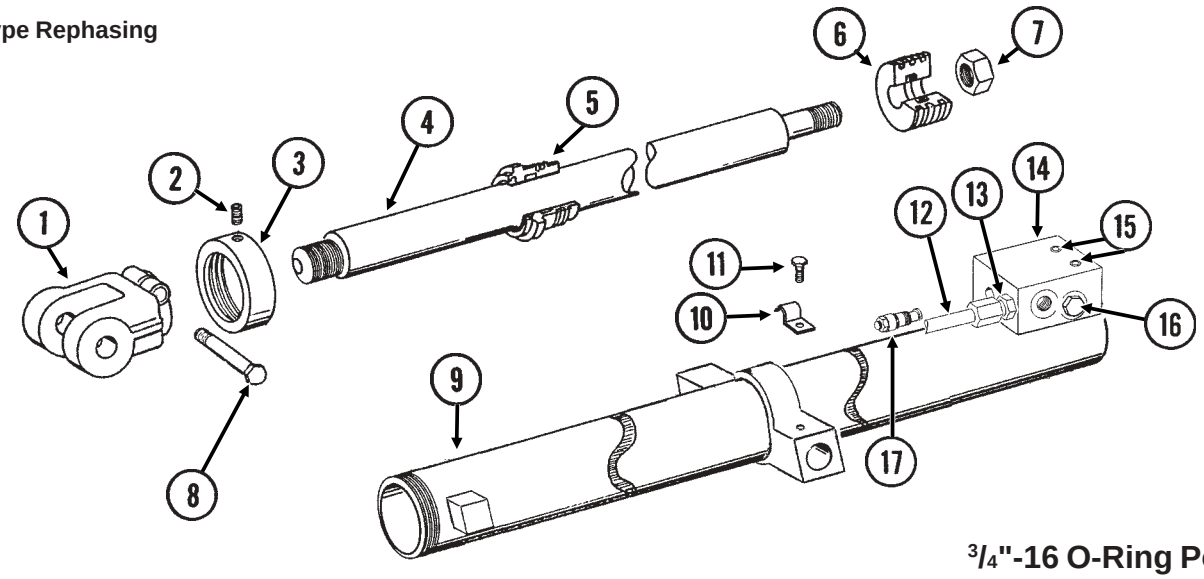
3/4"-16 O-Ring Ports

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD11951	1	Clevis
2.	G10907	1	Set Screw, 1/4"-20 x 1/4"
3.	GD11193	1	Cap
4.	GD10936	1	Rod
5.	GD10211	1	Gland
6.	GD11253	1	Piston
7.	G10958	1	Lock Nut, 1"-14
8.	G10939	1	Hex Head Cap Screw, 3/8"-16 x 2 1/4"
	G10108	1	Lock Nut, 3/8"-16
9.	GA9009	1	Barrel
10.	GD12657	1	Half Clip
11.	G10022	1	Hex Head Cap Screw, 1/4"-20 x 1/2"
	G10227	1	Lock Washer, 1/4"
12.	GA9011	1	Steel Hydraulic Line, 43 5/16"
13.	G6400-08	-	Connector W/O-Ring, 3/4"-16 Male JIC To O-Ring
	GR1037	0	O-Ring
14.	GD11579	1	Block
15.	G10932	2	Hex Socket Head Cap Screw, 5/16"-18 x 2", Grade 8
16.	G6408-08	-	Plug W/O-Ring, 3/4"-16 O-Ring
	GR1037	-	O-Ring
17.	GA8882	1	Counter Balance Valve
A.	GA9010	-	Cylinder Complete, 3" x 48" *(Part Number Stamped On Barrel)*
B.	GR1550	-	Seal Kit (For Cylinder And Counter Balance Valve), Includes: (1) Wiper, (1) U-Cup, (7) O-Rings, (4) BU Rings, (1) Seal, (1) Expander, (2) Cast Iron Rings

CENTER LIFT CYLINDER, 16 ROW 30"

(CYL54c)

Port Type Rephasing



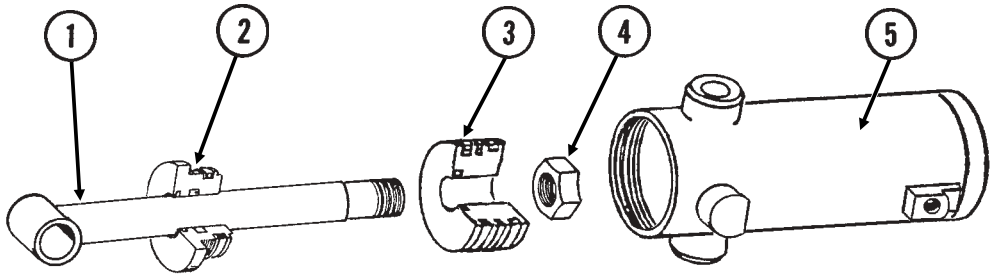
3/4"-16 O-Ring Ports

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD11951	1	Clevis
2.	G10907	1	Set Screw, 1/4"-20 x 1/4"
3.	GD13303	1	Cap
4.	GD13306	1	Rod
5.	GD13307	1	Gland
6.	GD13304	1	Piston
7.	G10958	1	Lock Nut, 1"-14
8.	G10939	1	Hex Head Cap Screw, 3/8"-16 x 2 1/4"
	G10108	1	Lock Nut, 3/8"-16
9.	GA9470	1	Barrel
10.	GD12657	1	Half Clip
11.	G10022	1	Hex Head Cap Screw, 1/4"-20 x 1/2"
	G10227	1	Lock Washer, 1/4"
12.	GA9011	1	Steel Hydraulic Line, 43 5/16"
13.	G6400-08	-	Connector W/O-Ring, 3/4"-16 Male JIC To O-Ring
	GR1037	0	O-Ring
14.	GD11579	1	Block
15.	G10932	2	Hex Socket Head Cap Screw, 5/16"-18 x 2", Grade 8
16.	G6408-08	-	Plug W/O-Ring, 3/4"-16 O-Ring
	GR1037	-	O-Ring
17.	GA8882	1	Counter Balance Valve
A.	GA9471	-	Cylinder Complete, 3 1/4" x 48" *(Part Number Stamped On Barrel)*
B.	GR1572	-	Seal Kit (For Cylinder And Counter Balance Valve), Includes: (1) Wiper, (1) U-Cup, (7) O-Rings, (4) BU Rings, (1) Seal, (1) Expander, (2) Cast Iron Rings

WING LIFT CYLINDER, 12 ROW 30"

CYL031/CYL011(CYL45d)

Port Type Rephasing



Port Type Rephasing

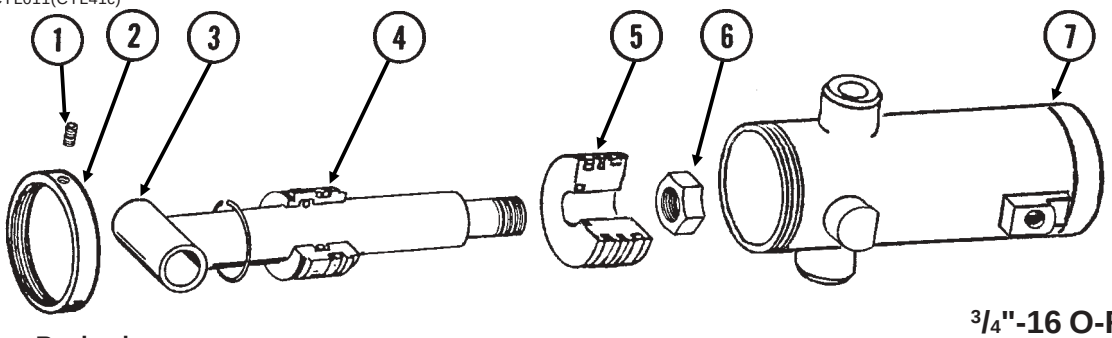
3/4"-16 O-Ring Ports

ITEM	PART NO.	QTY	DESCRIPTION
1.	GA8320	1	Rod Assembly W/Grease Fitting
	G10640	-	Grease Fitting, 1/4"-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 1/4" x 6" *(Part Number Stamped On Barrel)*
B.	GR1523	-	Seal Kit, Includes: (1) Wiper, (2) O-Rings, (1) BU Ring, (1) U-Cup, (2) Seals, (1) Piston Ring

WING LIFT CYLINDER, 16 ROW 30"

Port Type Rephasing

CYL031/CYL011(CYL41c)



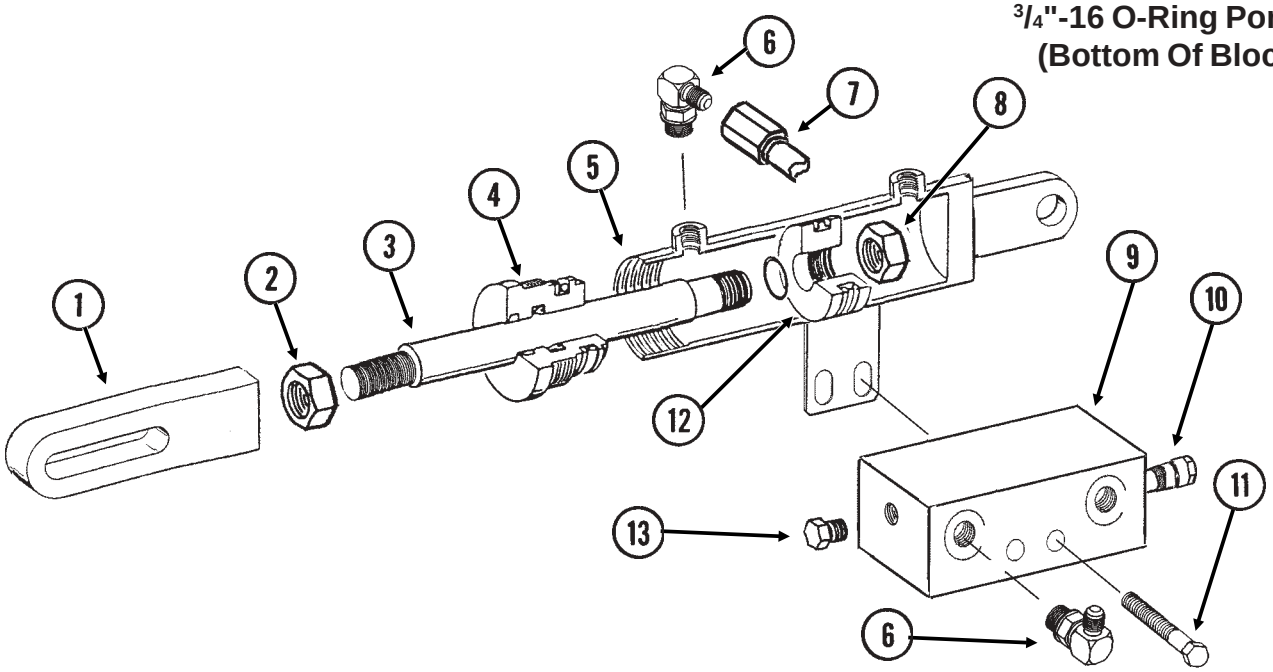
3/4"-16 O-Ring Ports

Port Type Rephasing

ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10907	1	Set Screw, 1/4"-20 x 1/4"
2.	GD13303	1	Cap
3.	GA8157	1	Rod Assembly W/Grease Fitting
	G10449	-	Grease Fitting, 3/16", Drive-In
4.	GD13302	1	Gland
5.	GD13304	1	Piston
6.	G10958	1	Lock Nut, 1"-14
7.	A9467	1	Barrel **(Non-Stock Item)**
A.	GA9468	-	Cylinder Complete, 3 1/4" x 6" *(Part Number Stamped On Barrel)*
B.	GR1573	-	Seal Kit, Includes: (1) Expander, (2) O-Rings, (1) BU Ring, (1) Wiper, (1) U-Cup, (1) Piston Seal, (2) Cast Iron Rings

WING LOCK CYLINDER, R.H. FRONT AND L.H. REAR

(CYL2d)

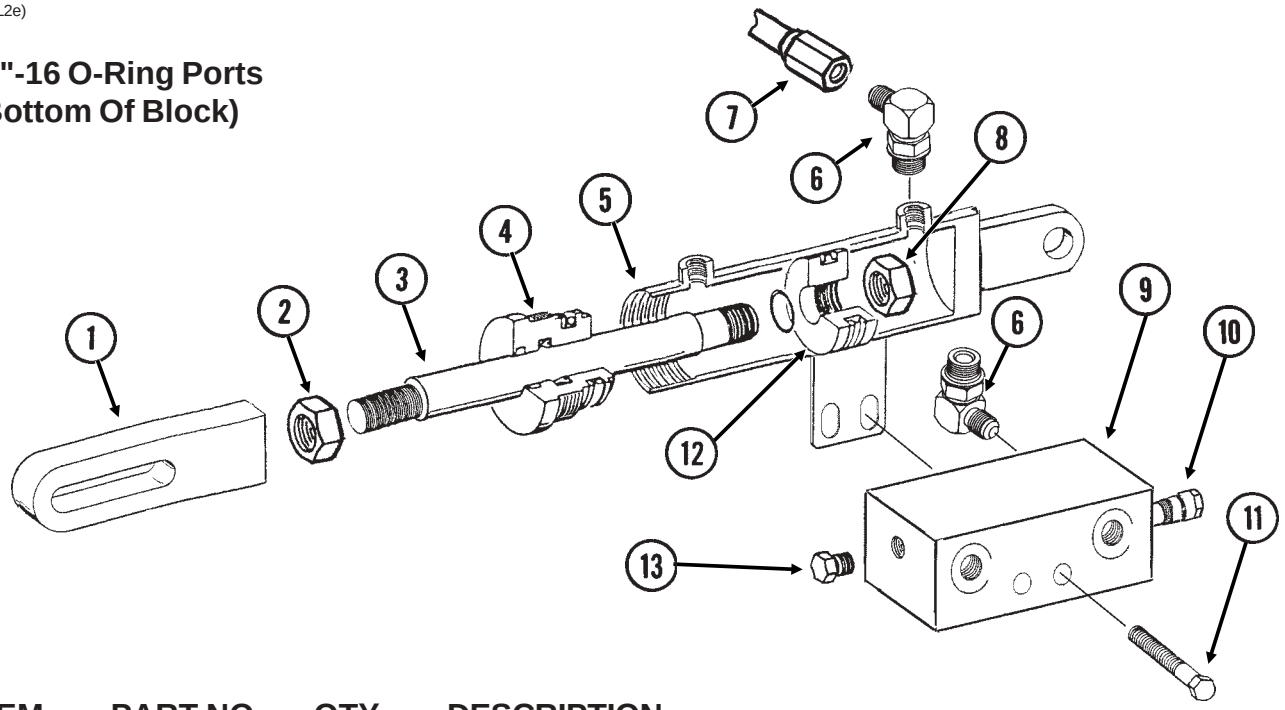


ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA9013	1	Clevis
2.	G10509	1	Hex Jam Nut, 1 1/4"-12, Grade 2
3.	GD12658	1	Rod
4.	GD12659	1	Gland
5.	A9015	1	Barrel **(Non-Stock Item)**
6.	G6801-06-08	4	Elbow W/O-Ring, 90°, 9/16"-18 Male JIC To 3/4"-16 O-Ring
	GR1037	-	O-Ring
7.	GA9012	2	Steel Hydraulic Line, 7 9/16"
8.	G10972	1	Lock Nut, 1 1/4"-12
9.	GD12665	1	Block
10.	GA8882	1	Counter Balance Valve
11.	G10753	2	Hex Head Cap Screw, 3/8"-16 x 4 1/2"
	G10203	4	Washer, 3/8" SAE
	G10229	2	Lock Washer, 3/8"
	G10101	2	Hex Nut, 3/8"-16
12.	GD12660	1	Piston
13.	G6408-08	3	Plug W/O-Ring, 3/4"-16 O-Ring
	GR1037	-	O-Ring
A.	GA9016	-	Cylinder Complete, 4" x 3 1/2" *(Part Number Stamped On Barrel)*
B.	GR1551	-	Seal Kit (For Cylinder And Counter Balance Valve), Includes: (1) Wiper, (5) O-Rings, (4) BU Rings, (1) U-Cup, (1) T-Seal

WING LOCK CYLINDER, L.H. FRONT AND R.H. REAR

(CYL2e)

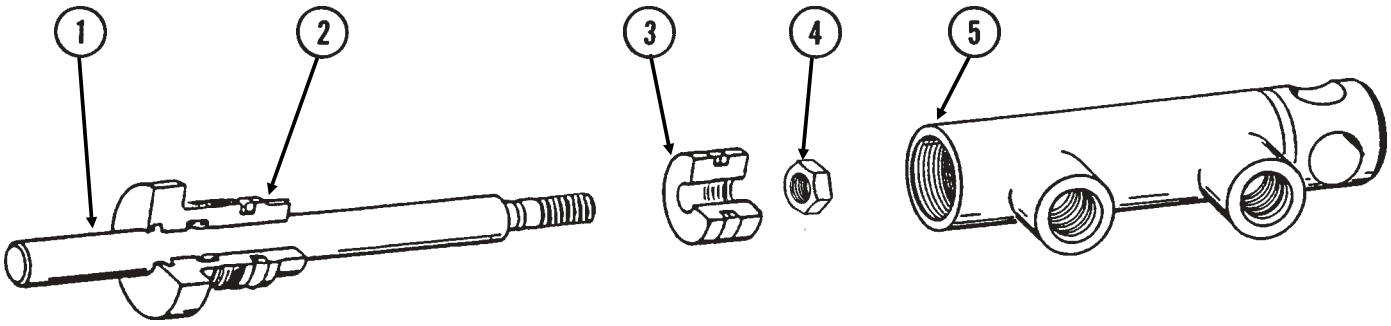
3/4"-16 O-Ring Ports (Bottom Of Block)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA9013	1	Clevis
2.	G10509	1	Hex Jam Nut, 1 1/4"-12, Grade 2
3.	GD12658	1	Rod
4.	GD12659	1	Gland
5.	A9015	1	Barrel **(Non-Stock Item)**
6.	G6801-06-08	4	Elbow W/O-Ring, 90°, 9/16"-18 Male JIC To 3/4"-16 O-Ring
	GR1037	-	O-Ring
7.	GA9012	2	Steel Hydraulic Line, 7 9/16"
8.	G10972	1	Lock Nut, 1 1/4"-12
9.	GD12665	1	Block
10.	GA8882	1	Counter Balance Valve
11.	G10753	2	Hex Head Cap Screw, 3/8"-16 x 4 1/2"
	G10203	4	Washer, 3/8" SAE
	G10229	2	Lock Washer, 3/8"
	G10101	2	Hex Nut, 3/8"-16
12.	GD12660	1	Piston
13.	G6408-08	3	Plug W/O-Ring, 3/4"-16 O-Ring
	GR1037	-	O-Ring
A.	GA9134	-	Cylinder Complete, 4" x 3 1/2" *(Part Number Stamped On Barrel)*
B.	GR1551	-	Seal Kit (For Cylinder And Counter Balance Valve), Includes: (1) Wiper, (5) O-Rings, (4) BU Rings, (1) U-Cup, (1) T-Seal

TRANSPORT LATCH CYLINDER, ALL SIZES

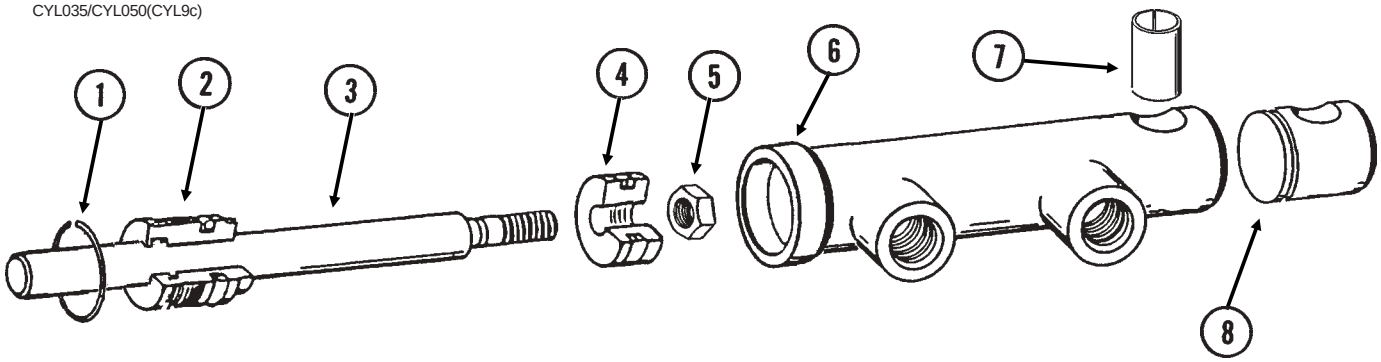
CYL035/CYL050(CYL9b)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD7124	1	Rod
2.	GD7122	1	Gland
3.	GD7120	1	Piston
4.	GR0999	1	Lock Nut, 1/2"-20
5.	A6020	1	Barrel **(Non-Stock Item)**
A.	GA4309	-	Cylinder Complete, 1 1/2" x 2 1/2" *(Part Number Stamped On Barrel)*
B.	GR1001	-	Seal Kit, Includes: (2) O-Rings, (1) U-Cup, (1) Wiper, (1) T-Seal

TRANSPORT LATCH CYLINDER, ALL SIZES

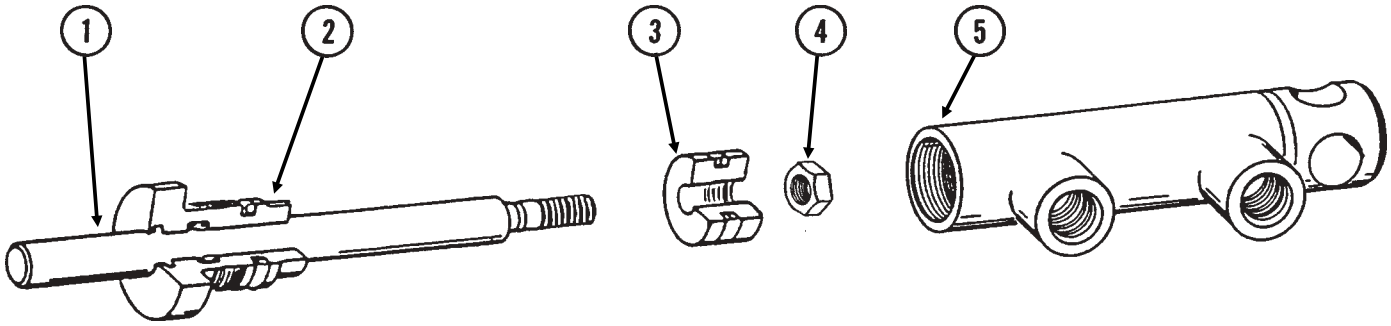
CYL035/CYL050(CYL9c)



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, 1/2"-20
6.	D13426	1	Barrel **(Non-Stock Item)**
7.	GD13400	1	Tension Bushing, 1" x 2"
8.	GD13173	1	End Cap
A.	GA9559	-	Cylinder Complete, 1 1/2" x 2 1/2" *(Part Number Stamped On Barrel)*
B.	GR1598	-	Seal Kit, Includes: (4) O-Rings, (2) BU Rings, (1) Wiper, (1) T-Seal, (1) Bronze Bushing

TONGUE LOCK CYLINDER, ALL SIZES

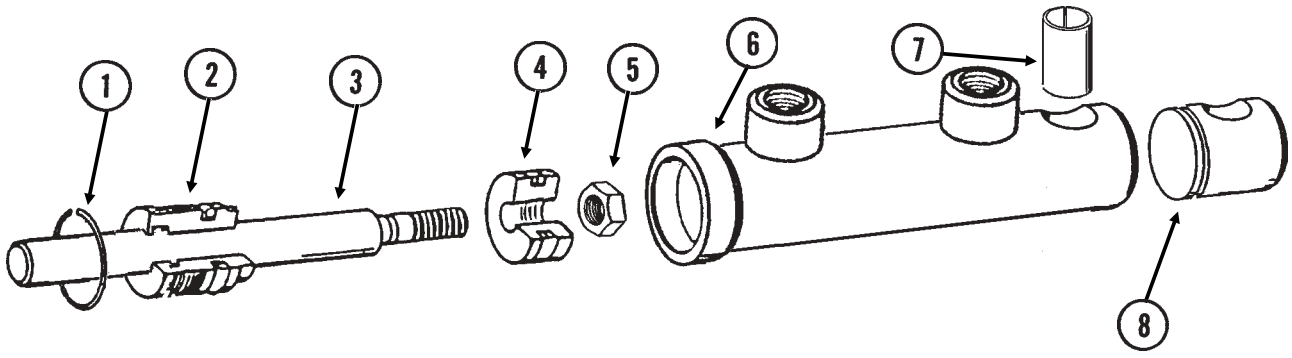
CYL035(CYL9b)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD7123	1	Rod
2.	GD7122	1	Gland
3.	GD7120	1	Piston
4.	GR0999	1	Lock Nut, 1/2"-20
5.	A6020	1	Barrel **(Non-Stock Item)**
A.	GA4310	-	Cylinder Complete, 1 1/2" x 2 1/2" *(Part Number Stamped On Barrel)*
B.	GR1001	-	Seal Kit, Includes: (2) O-Rings, (1) U-Cup, (1) Wiper, (1) T-Seal

TONGUE LOCK CYLINDER, ALL SIZES

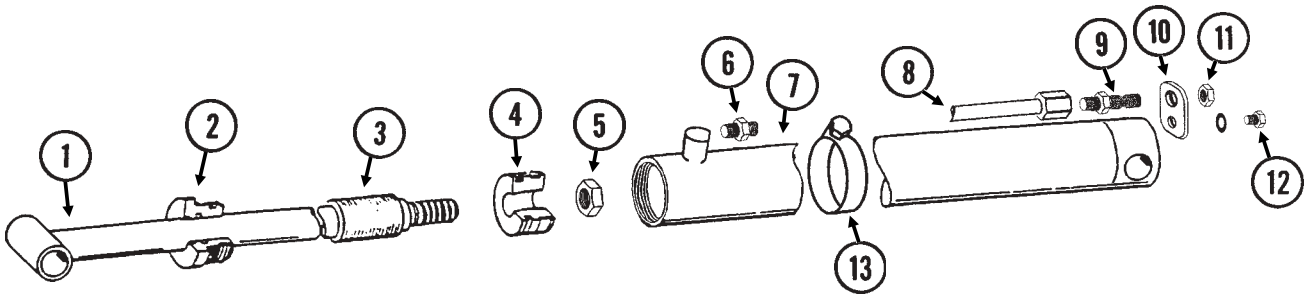
CYL035(CYL9d)



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, 1/2"-20
6.	D13169	1	Barrel **(Non-Stock Item)**
7.	GD13400	1	Tension Bushing, 1" x 2"
8.	GD13173	1	End Cap
A.	GA9205	-	Cylinder Complete, 1 1/2" x 2 1/2" *(Part Number Stamped On Barrel)*
B.	GR1598	-	Seal Kit, Includes: (4) O-Rings, (2) BU Rings, (1) Wiper, (1) T-Seal, (1) Bronze Bushing

TONGUE CYLINDER, 12 ROW 30"

(CYL12f)

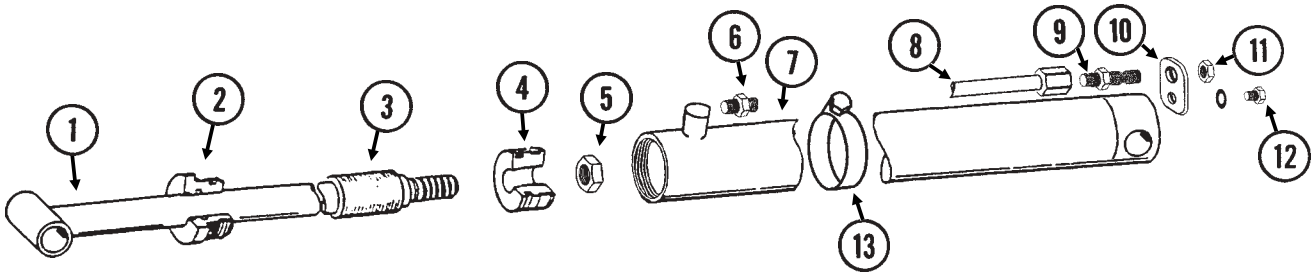


3/4"-16 O-Ring Port
And 3/4"-16 JIC Port

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 1/4"-12
6.	G6400-08-04	1	Connector W/O-Ring, 3/4"-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, 3/4"-16 Male JIC
10.	GD12597	1	Bracket
11.	G306-08	1	Lock Nut, 3/4"-16
12.	G10328	1	Hex Head Cap Screw, 3/8"-16 x 5/8"
	G10229	1	Lock Washer, 3/8"
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 W/BU Rings

TONGUE CYLINDER, 16 ROW 30"

CYL036(CYL12f)

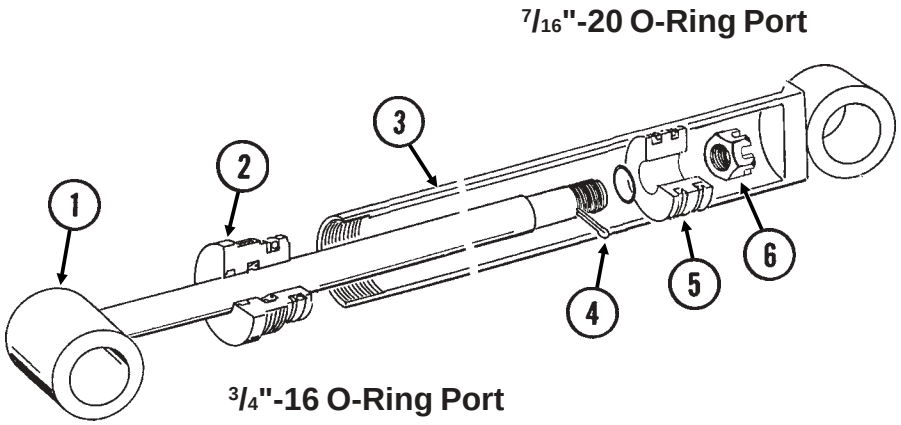


3/4"-16 O-Ring Port
And 3/4"-16 JIC Port

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 1/4"-12
6.	G6400-08-04	1	Connector W/O-Ring, 3/4"-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, 3/4"-16 Male JIC
10.	GD12597	1	Bracket
11.	G306-08	1	Lock Nut, 3/4"-16
12.	G10328	1	Hex Head Cap Screw, 3/8"-16 x 5/8"
	G10229	1	Lock Washer, 3/8"
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 W/BU Rings

MARKER (Cushion) CYLINDER

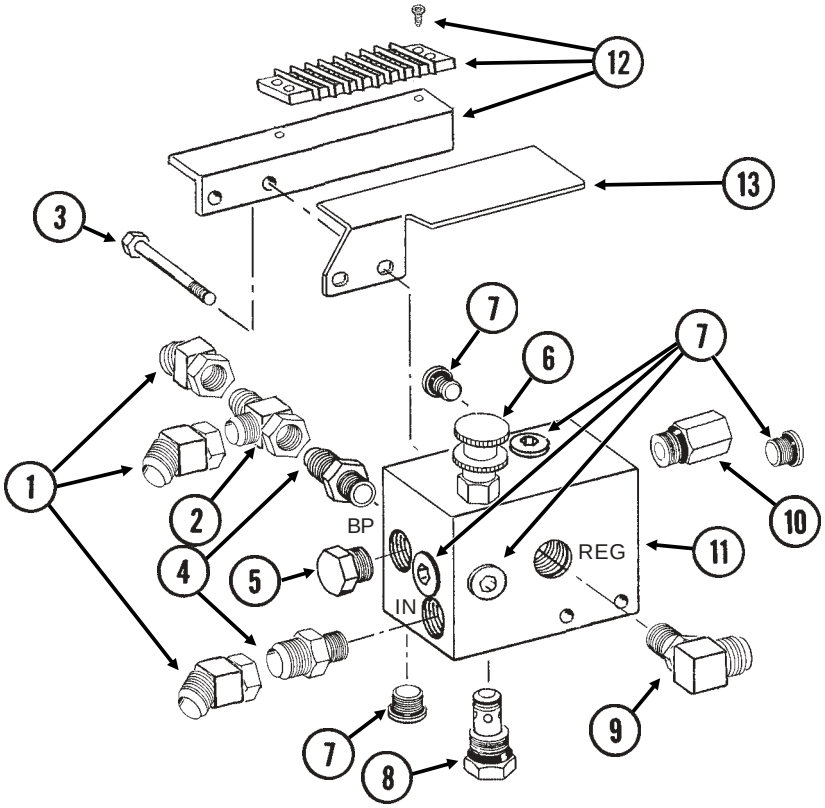
(CYL3d)



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, 1/8" x 1 3/4"
5.	GD11983	1	Piston
6.	G10962	1	Slotted Hex Nut, 7/8"-14
A.	GA8895	-	Cylinder Complete, 2 1/2" 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) Lip Seal

VALVE BLOCK - LOCATED ON FRONT CENTER FRAME

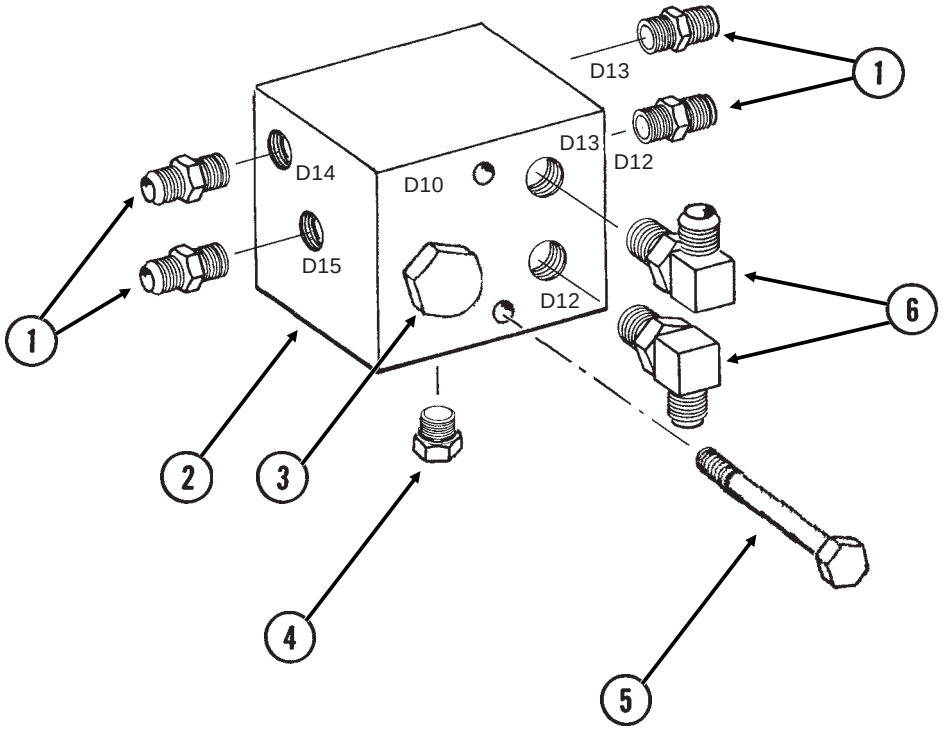
VVB036(TWL24d)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	G6502-10	3	Swivel Elbow, 45°, 7/8"-14 Male JIC To Female
2.	G6602-10	1	Swivel Tee, 7/8"-14 JIC
3.	G10325	2	Hex Head Cap Screw, 3/8"-16 x 2 3/4"
	G10108	2	Lock Nut, 3/8"-16
4.	G6400-10-08	2	Connector W/O-Ring, 7/8"-14 Male JIC To 3/4"-16 O-Ring
	GR1037	-	O-Ring
5.	GR1603	1	Plug W/Stop Pin
6.		-	See “Flow Control Valve”, Page P93
7.	GR1607	6	Socket Plug
8.		-	See “Check Valve”, Page P93
9.	G6801-10-08	1	Elbow W/O-Ring, 90°, 7/8"-14 Male JIC To 3/4"-16 O-Ring
	GR1037	-	O-Ring
10.		-	See “Pressure Relief Valve”, Page P93
11.		-	Block **(Non-Stock Item)**
12.		-	See “Bulk Seed Hopper Monitor”, Pages P108 And P109
13.	GD14390	-	Cover
A.	GR1609	-	Seal Kit, Includes: (12) O-Rings, (2) BU Rings

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

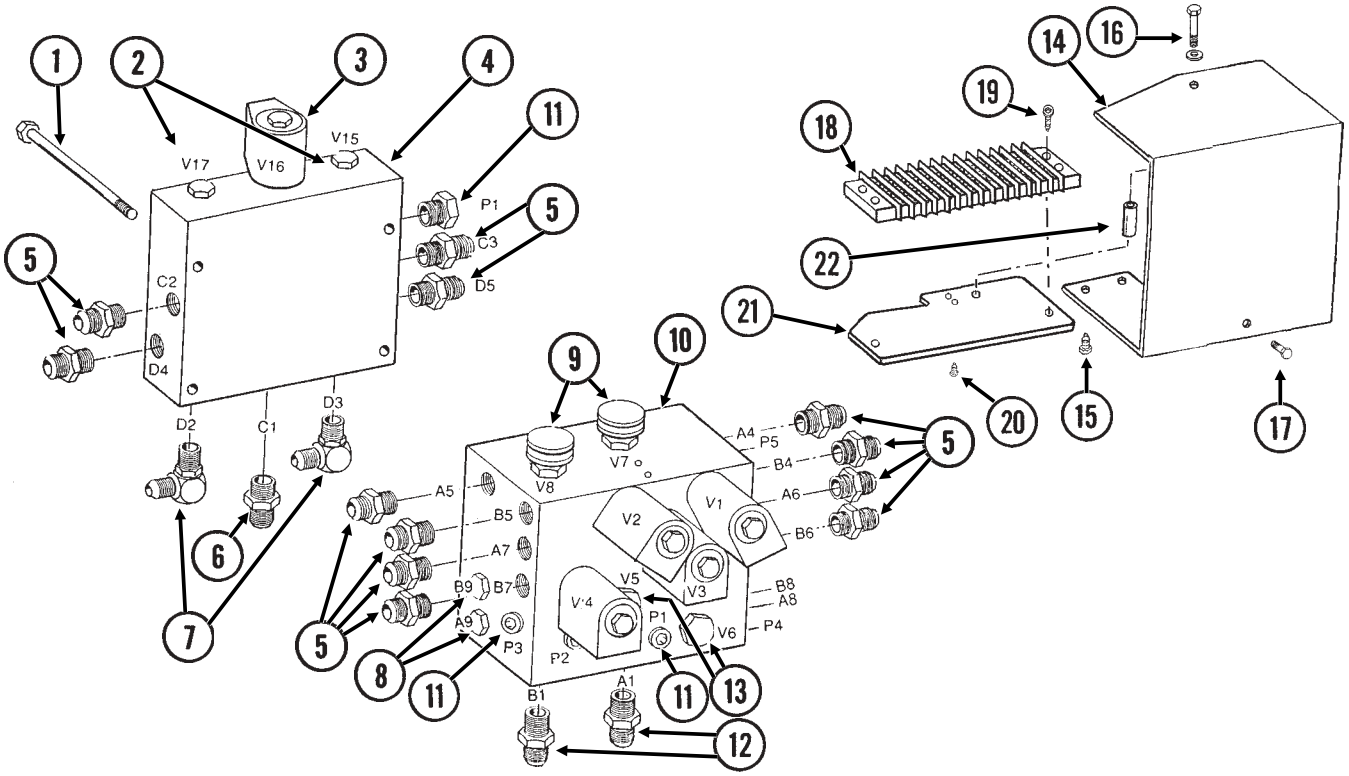
VVB036(TWL208)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	G6400-08	4	Connector W/O-Ring, 3/4"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
2.	GD12758	1	Block
3.		-	See “Pilot Operated Check Valve”, Page P95
4.	G6408-08	1	Plug W/O-Ring, 3/4"-16 O-Ring
	GR1037	-	O-Ring
5.	G10062	2	Hex Head Cap Screw, 3/8"-16 x 3"
	G10108	2	Lock Nut, 3/8"-16
6.	G6801-08	2	Elbow W/O-Ring, 90°, 3/4"-16 Male JIC To O-Ring
	GR1037	-	O-Ring

VALVE BLOCKS - LOCATED ON REAR CENTER FRAME

VVB034(TWL25b)

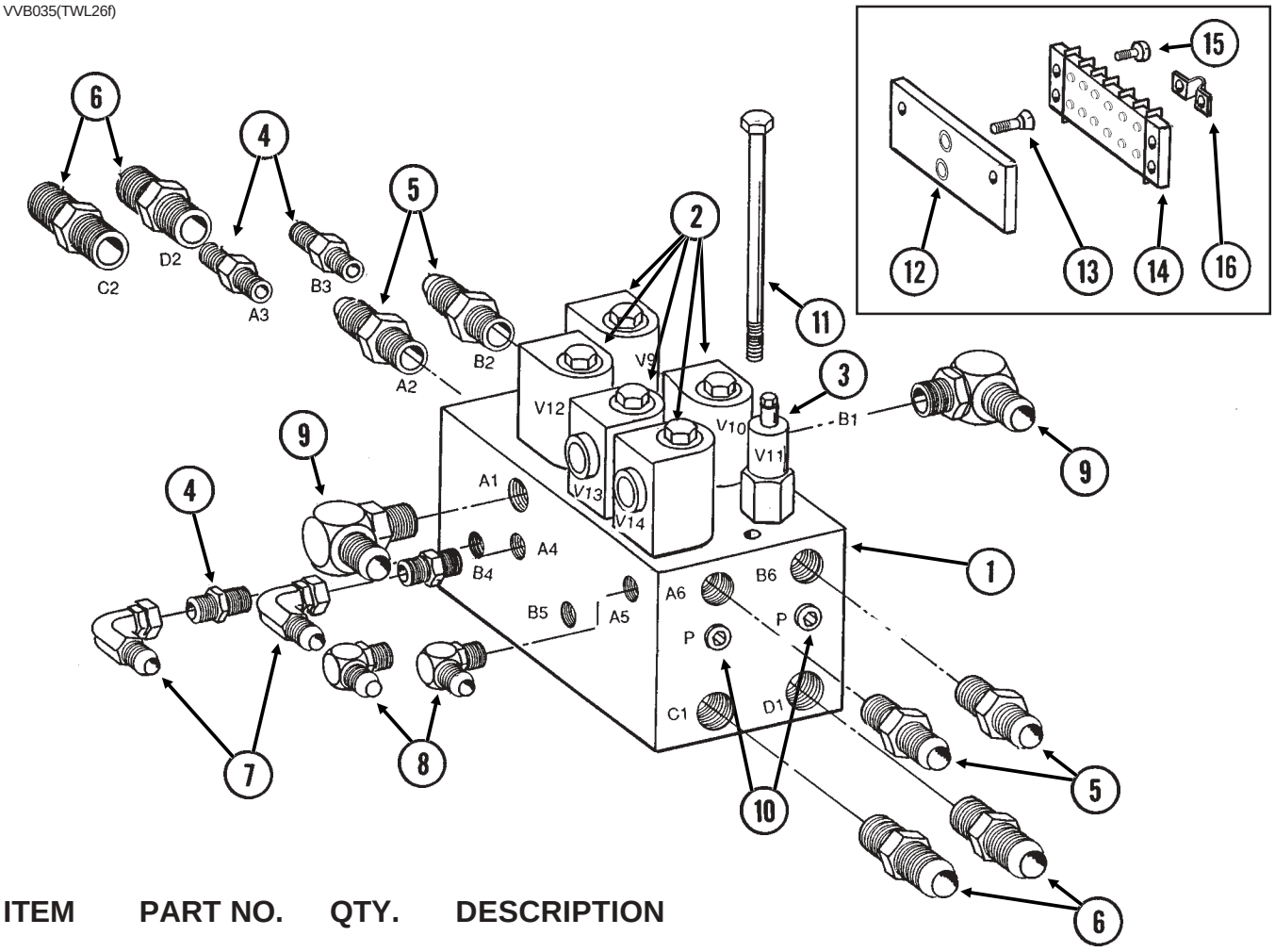


VALVE BLOCKS - LOCATED ON REAR CENTER FRAME

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 P95
3.		5	See “Solenoid Valve”, Page P94
4.	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 P94
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.	GD13146	1	Cover
15.	G10977	2	Phillips Pan Head Machine Screw, No. 10-24 x 1/2", Stainless Steel
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.	G11002	2	Slotted Pan Head Machine Screw, No. 8-32 x 3/4", Stainless Steel
20.	G11004	2	Slotted Pan Head Machine Screw, No. 10-24 x 3/4", Stainless Steel
21.	GA9095	1	Terminal Strip Mount
22.	GD8066-02	1	Sleeve, 1" Long

VALVE BLOCK - LOCATED ON HITCH

VVB035(TWL26f)

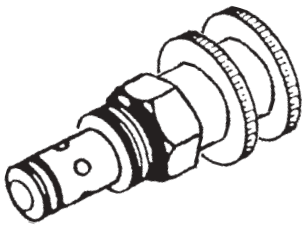


ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD9905	1	Block
2.		-	See “Solenoid Valve”, Page P94
3.		-	See “Pressure Relief Valve”, Page P94
4.	G6400-06	4	Connector W/O-Ring, $^{9}/_{16}$"-18 Male JIC To O-Ring
	GR1045	-	O-Ring
5.	G6400-08	4	Connector W/O-Ring, $^{3}/_{4}$"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
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 P46 And P47
12.	GD12818	-	Terminal Strip Mount
13.	G11001	2	Slotted 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.	G11002	2	Slotted Pan Head Machine Screw, No. 8-32 x $^{3}/_{4}$", Stainless Steel
16.		-	See “Electrical Components”, Pages P102 And P103

FLOW CONTROL VALVE (Located In Valve Block On Front Center Frame)

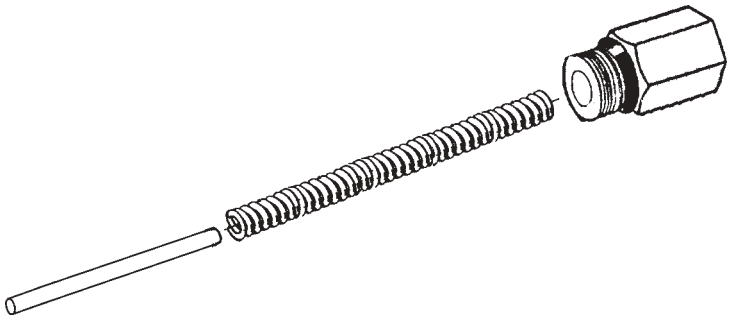
(TWL28a)

ITEM	PART NO.	QTY.	DESCRIPTION
A.	GR1601	-	Flow Control Valve
B.	GR1610	-	Seal Kit, Includes: (2) O-Rings, (1) BU Ring



PRESSURE RELIEF VALVE (Located In Valve Block On Front Center Frame)

(TWL24c)

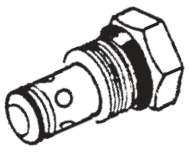


ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR1604	1	Cap
2.	GR1605	1	Compression Spring
3.	GR1606	1	Spring Guide
4.	GR1608	2	O-Ring

CHECK VALVE (Located In Valve Block On Front Center Frame)

(TWL24b)

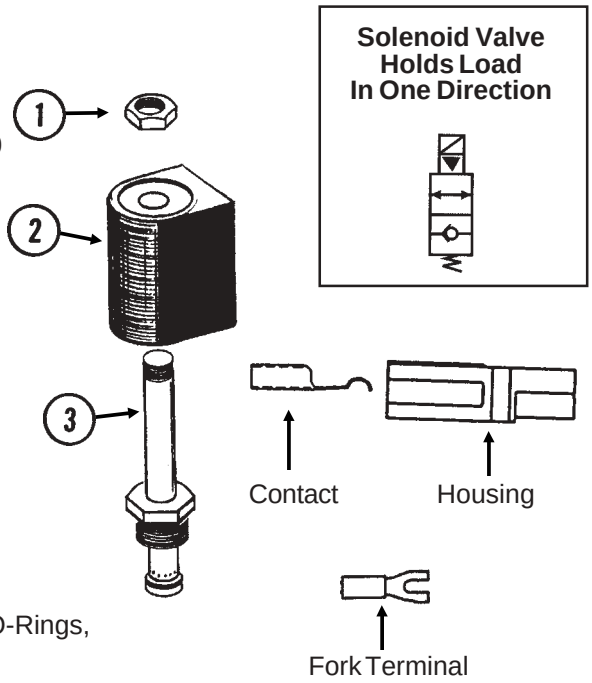
ITEM	PART NO.	QTY.	DESCRIPTION
A.	GR1602	-	Check Cartridge
B.	GR1610	-	Seal Kit, Includes: (2) O-Rings, (1) BU Ring



SOLENOID VALVE

VVB019(TWL27c/TWL18/PLTR75c/A9481)

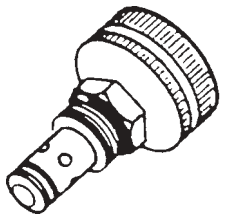
ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR0761	1	Special Hex Nut, 1/2"-20
2.	G1K274	1	Coil Kit W/Contacts, Housings And Fork Terminals
	GD9529	2	Housing, Black
	GD9530	2	Contact
	G10996	2	Fork Terminal
3.	GR0763	1	Cartridge
A.	G1K275	-	Solenoid Valve Kit W/Contacts, Housings And Fork Terminals
	GD9529	2	Housing,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



FLOW CONTROL VALVE (Located In Valve Block On Rear Center Frame)

VVB020(TWL28)

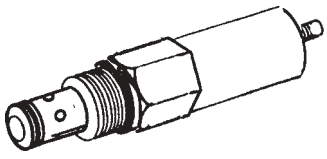
ITEM	PART NO.	QTY.	DESCRIPTION
A.	GA3413	-	Flow Control Valve
B.	GR0764	-	Seal Kit, Includes: (2) O-Rings, (1) BU Ring



PRESSURE RELIEF VALVE (Located In Valve Block On Hitch)

VVB020(TWL29)

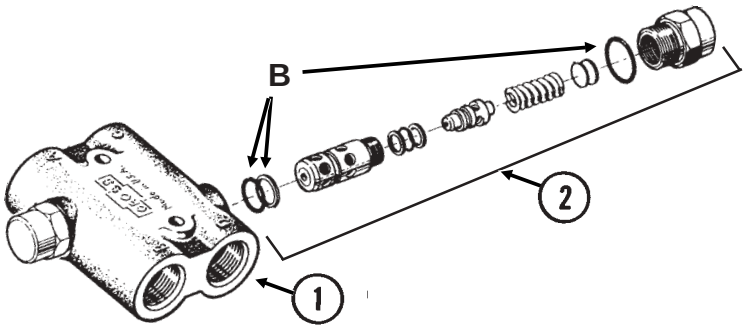
ITEM	PART NO.	QTY.	DESCRIPTION
A.	GA3407	-	Pressure Relief Valve, 1000 PSI
B.	GR0764	-	Seal Kit, Includes: (2) O-Rings, (1) BU Ring



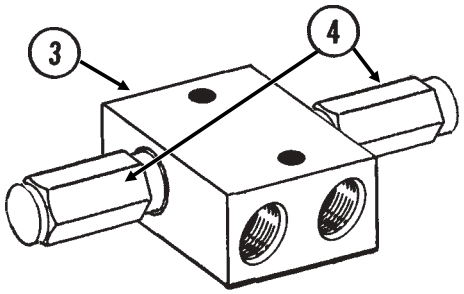
RELIEF VALVE (Located On Hitch)

(TWL147/TWL171)

All 12 Row 30", 16 Row 30" (If Applicable)



STYLE A



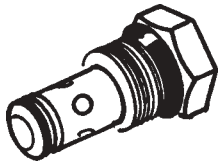
STYLE B

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR1402	1	Body
2.	GR1403	2	Cartridge
3.	GR1513	1	Body
4.	GR1514	2	Cartridge
A.	GA8129A	-	Relief Valve Complete (Items 1 And 2)
B.	GR1404	-	Seal Kit For Style A, Includes: (2) O-Rings, (1) BU Ring
C.	GA8129B	-	Relief Valve Complete (Items 3 And 4)
D.	GR1515	-	Seal Kit For Style B, Includes: (2) O-Rings, (1) BU Ring

CHECK VALVE (Located In Valve Block On Rear Center Frame)

VVB020(TWL30)

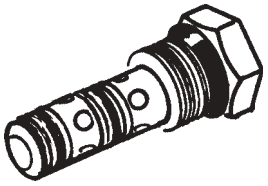
ITEM	PART NO.	QTY.	DESCRIPTION
A.	GA4293	-	Check Valve
B.	GR0764	-	Seal Kit, Includes: (2) O-Rings, (1) BU Ring



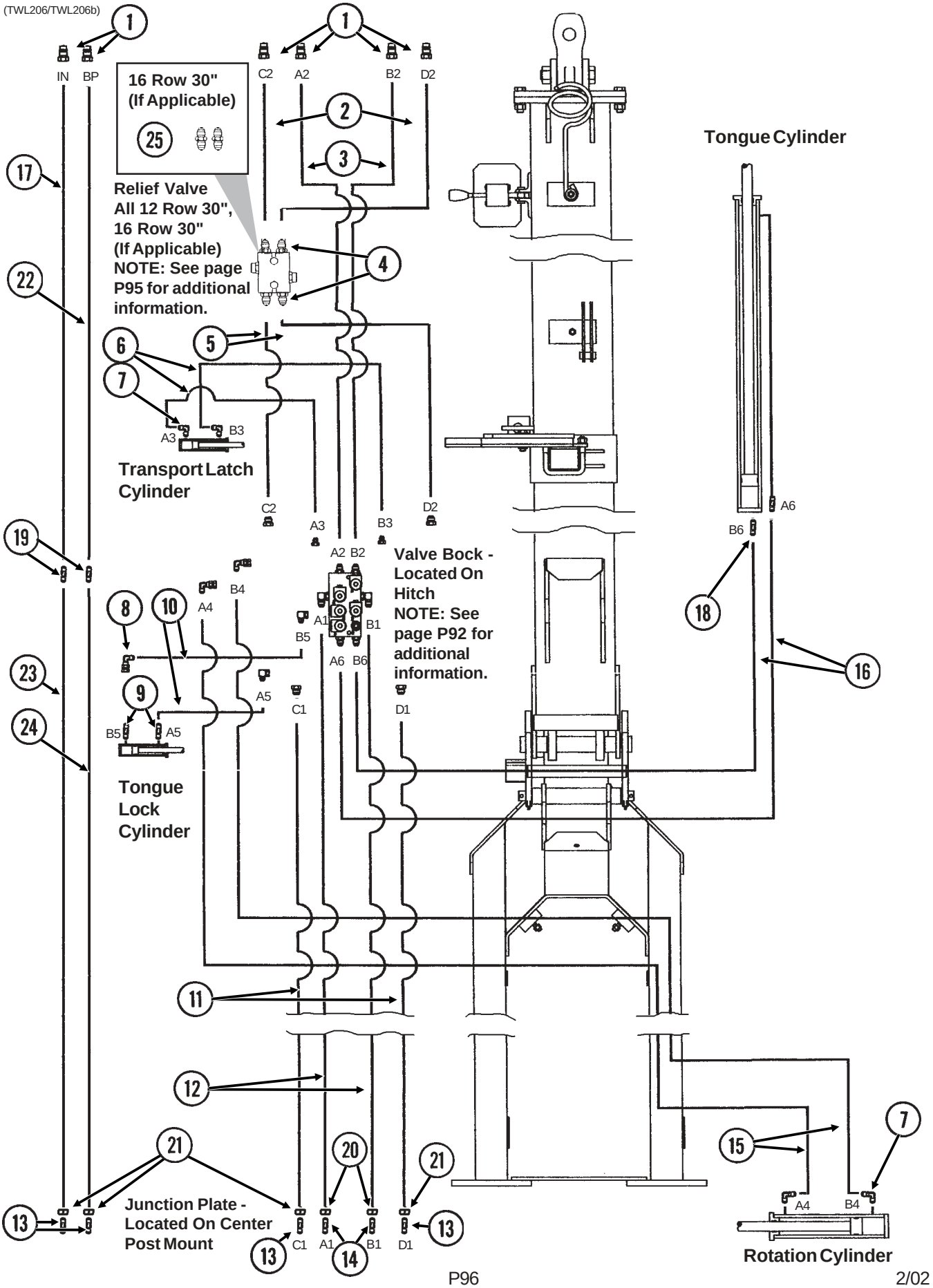
PILOT OPERATED CHECK VALVE (Located In Valve Block On R.H. Side Of Front Center Frame)

VVB020(TWL30b)

ITEM	PART NO.	QTY.	DESCRIPTION
A.	GA9126	-	Pilot Operated Check Valve
B.	GR1627	-	Seal Kit, Includes: (3) O-Rings, (4) BU Rings



HYDRAULIC HOSES AND FITTINGS ON HITCH



HYDRAULIC HOSES AND FITTINGS ON HITCH

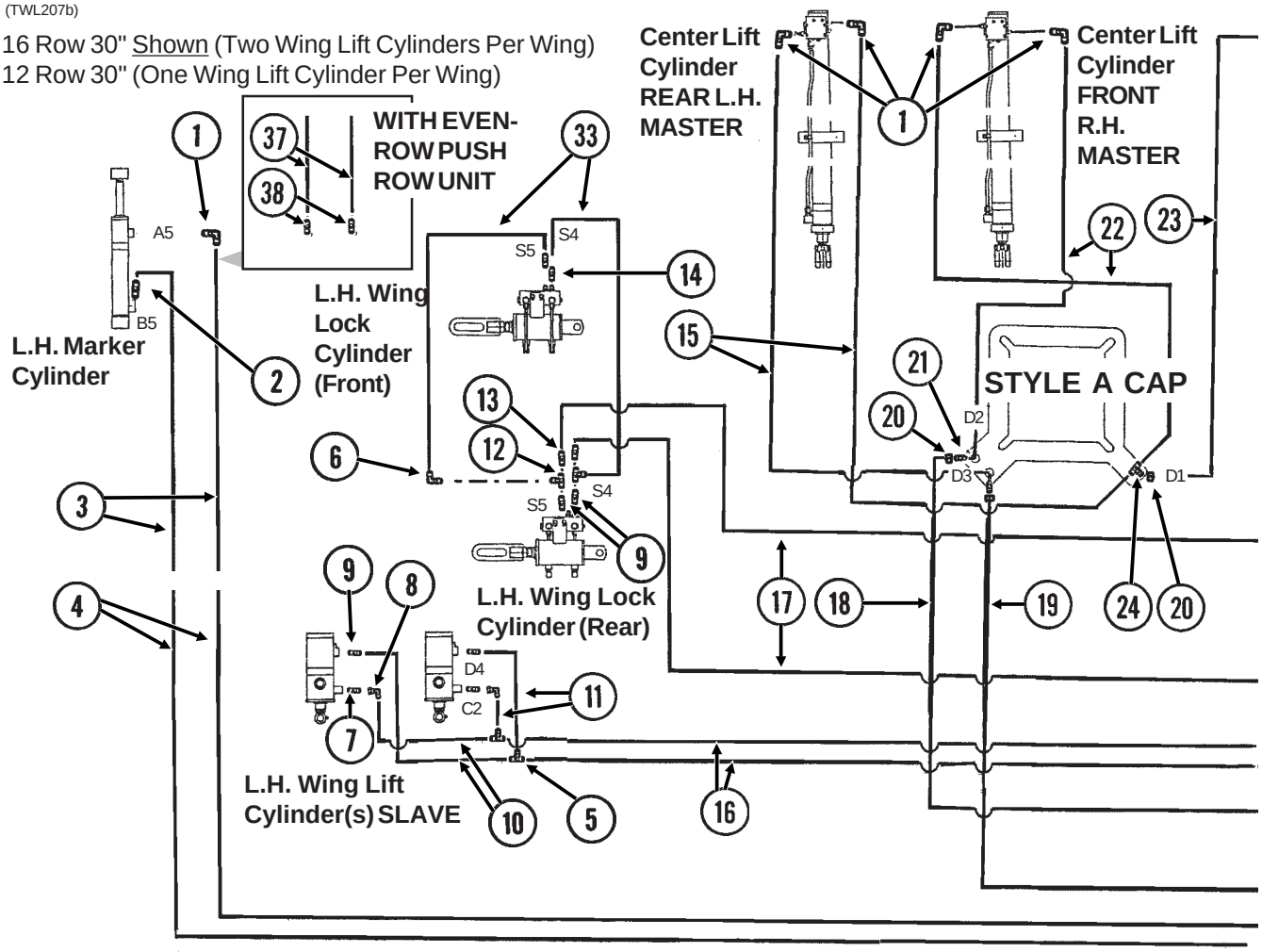
ITEM	PART NO.	QTY.	DESCRIPTION
1.	GD4086	6	ISO Coupler
2.	*A8206	2	Hose Assembly, 1/2" x 147", 12 Row 30"
	*A8200	2	Hose Assembly, 1/2" x 178", 16 Row 30"
3.	*A3133	2	Hose Assembly, 3/8" x 191", 12 Row 30"
	*A3183	2	Hose Assembly, 3/8" x 246", 16 Row 30"
4.	G6400-10	4	Connector W/O-Ring, 7/8"-14 Male JIC To O-Ring
	GR1466	-	O-Ring
5.	*A8203	2	Hose Assembly, 1/2" x 43", 12 Row 30"
	*A1463	2	Hose Assembly, 1/2" x 68", 16 Row 30"
6.	*A7603	2	Hose Assembly, 1/4" x 112", 12 Row 30"
	*A1129	2	Hose Assembly, 1/4" x 168", 16 Row 30"
7.	G6801-06-08	4	Elbow W/O-Ring, 90°, 9/16"-18 Male JIC To 3/4"-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 3/4"-16 O-Ring
	GR1037	-	O-Ring
10.	*A1139	2	Hose Assembly, 1/4" x 40", 12 Row 30" And 16 Row 30"
11.	*A8217	2	Hose Assembly, 1/2" x 133", 12 Row 30"
	*A8218	2	Hose Assembly, 1/2" x 139", 16 Row 30"
12.	*A3137	2	Hose Assembly, 3/8" x 140", 12 Row 30"
	*A3115	2	Hose Assembly, 3/8" x 146", 16 Row 30"
13.	G2700-10	4	Bulkhead Tube Union, 7/8"-14 Male JIC
14.	G2700-08	2	Bulkhead Tube Union, 3/4"-16 Male JIC
15.	*A1106	2	Hose Assembly, 1/4" x 130", 12 Row 30"
	*A1116	2	Hose Assembly, 1/4" x 136", 16 Row 30"
16.	*A3156	2	Hose Assembly, 3/8" x 68", 12 Row 30"
	*A3118	2	Hose Assembly, 3/8" x 80", 16 Row 30"
17.	*A1477	1	Hose Assembly, 1/2" x 198", 12 Row 30"
	*A1444	1	Hose Assembly, 1/2" x 250", 16 Row 30"
18.	G6400-08	1	Connector W/O-Ring, 3/4"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
19.	G2403-10	2	Union, 7/8"-14 Male JIC
20.	G306-08	2	Lock Nut, 3/4"-16
21.	G306-10	4	Lock Nut, 7/8"-14
22.	*A3331	1	Hose Assembly, 3/4" x 198", 12 Row 30"
	*A3332	1	Hose Assembly, 3/4" x 250", 16 Row 30"
23.	*A8216	1	Hose Assembly, 1/2" x 144"
24.	*A3333	1	Hose Assembly, 3/4" x 144"
25.	G2403-10	2	Union, 7/8"-14 Male JIC

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HYDRAULIC HOSES AND FITTINGS ON PLANTER FRAME

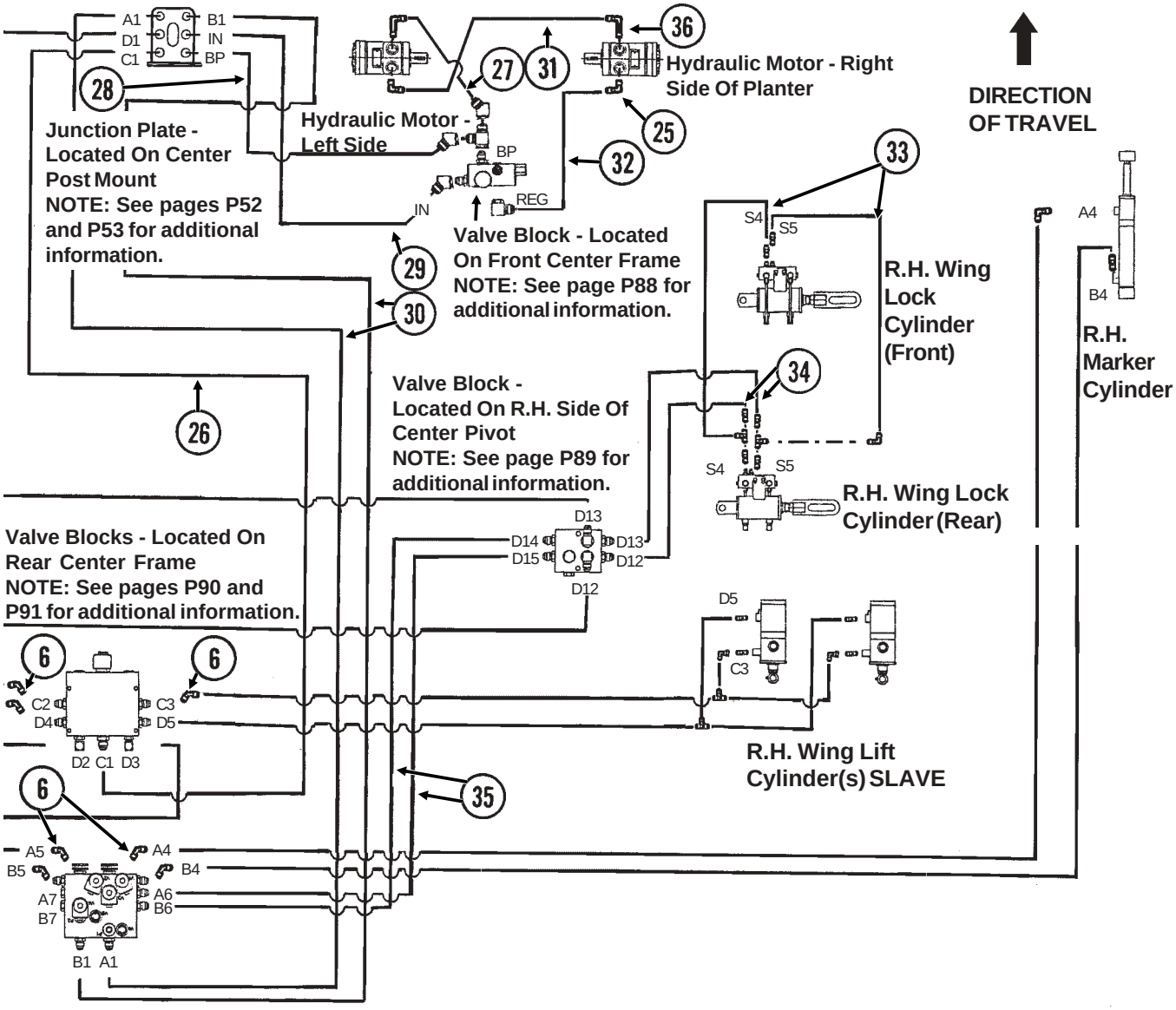
(TWL207b)

16 Row 30" Shown (Two Wing Lift Cylinders Per Wing)
12 Row 30" (One Wing Lift Cylinder Per Wing)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	G6801-08	6	Elbow W/O-Ring, 90°, 3/4"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
2.	G6400-08-04	2	Connector W/O-Ring, 3/4"-16 Male JIC To 7/16"-20 O-Ring
	GR1465	-	O-Ring
3.	*A3220	4	Hose Assembly, 3/8" x 82", 12 Row 30"
	*A3219	-	Hose Assembly, 3/8" x 104", 16 Row 30"
4.	*A3101	4	Hose Assembly, 3/8" x 168", 12 Row 30"
	*A3161	-	Hose Assembly, 3/8" x 210", 16 Row 30"
5.	G2603-08	4	Tee, 3/4"-16 Male JIC
6.	G6502-08	9	Swivel Elbow, 45°, 3/4"-16 Male JIC To Female
7.	G6400-L-08	2-4	Long Connector W/O-Ring, 3/4"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
8.	G6500-08	2-4	Swivel Elbow, 90°, 3/4"-16 Male JIC To Female
9.	G6400-08	6-8	Connector W/O-Ring, 3/4"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
10.	*A1018	4	Hose Assembly, 3/8" x 40"
11.	*A3218	4	Hose Assembly, 3/8" x 8"
12.	G6602-08	4	Swivel Tee, 3/4"-16 JIC
13.	G2406-08-06	4	Reducer, 3/4"-16 Female JIC To 9/16"-18 Male JIC
14.	G6400-06-08	4	Connector W/O-Ring, 9/16"-18 Male JIC To 3/4"-16 O-Ring
	GR1037	-	O-Ring
15.	*A3153	2	Hose Assembly, 3/8" x 22"
16.	*A1054	4	Hose Assembly, 3/8" x 204", 12 Row 30"
	*A3163	-	Hose Assembly, 3/8" x 225", 16 Row 30"
17.	*A1008	1	Hose Assembly, 3/8" x 110"
18.	*A1079	1	Hose Assembly, 3/8" x 24"
19.	*A1086	1	Hose Assembly, 3/8" x 28"

HYDRAULIC HOSES AND FITTINGS ON PLANTER FRAME



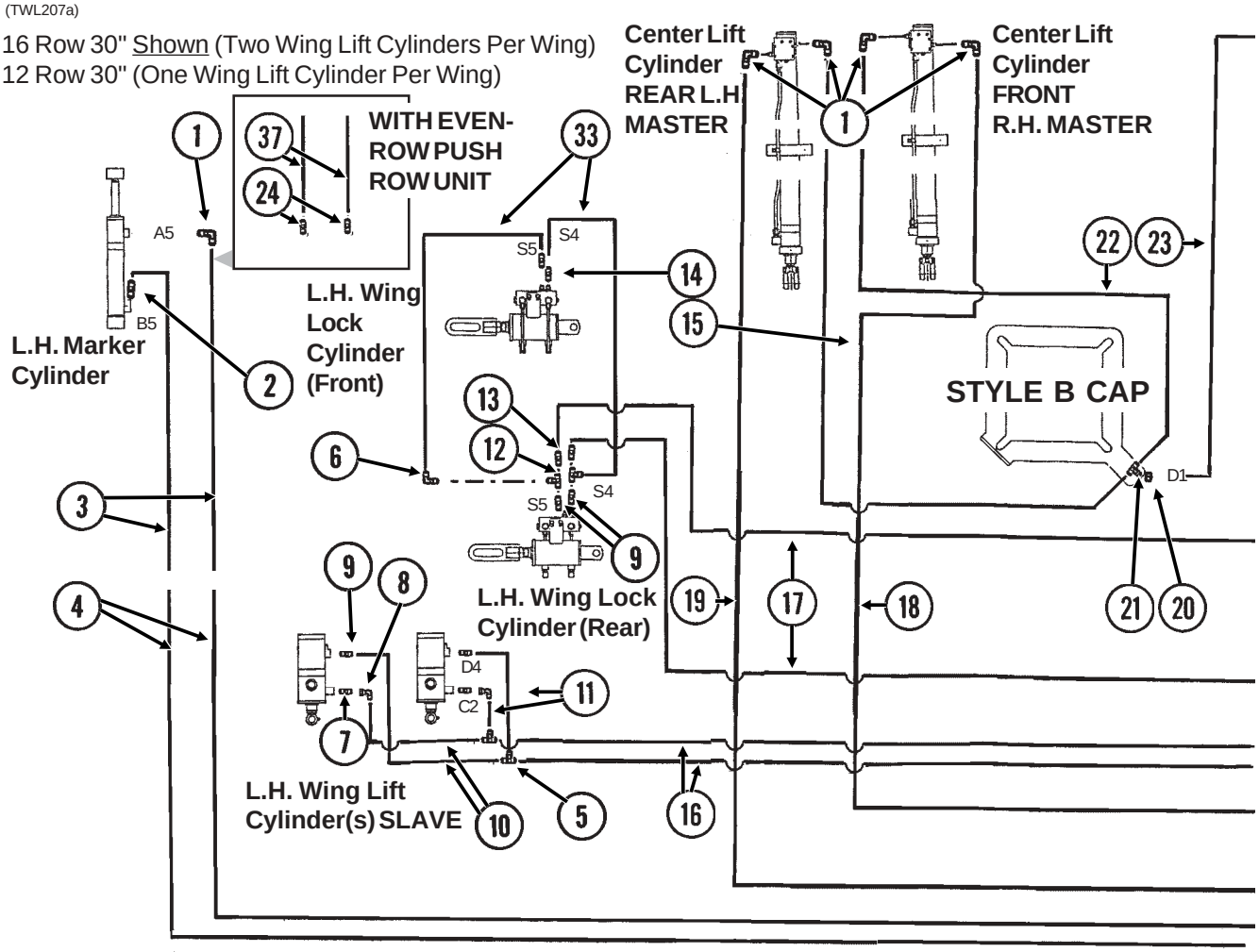
ITEM	PART NO.	QTY.	DESCRIPTION
20.	G306-08	3	Lock Nut, 3/4"-16
21.	G2700-08	2	Bulkhead Tube Union, 3/4"-16 Male JIC
22.	*A1076	2	Hose Assembly, 3/8" x 30"
23.	*A8215	1	Hose Assembly, 1/2" x 87"
24.	G2704-08	1	Bulkhead Tee, 3/4"-16 JIC
25.	G6801-10	2	Elbow W/O-Ring, 90°, 7/8"-14 Male JIC To O-Ring
	GR1466	-	O-Ring
26.	*A1464	1	Hose Assembly, 1/2" x 72"
27.	*A3329	1	Hose Assembly, 3/4" x 29"
28.	*A3330	1	Hose Assembly, 3/4" x 107"
29.	*A8214	1	Hose Assembly, 1/2" x 107"
30.	*A1053	2	Hose Assembly, 3/8" x 72"
31.	*A1457	1	Hose Assembly, 1/2" x 51"
32.	*A1424	1	Hose Assembly, 1/2" x 30"
33.	*A1189	4	Hose Assembly, 1/4" x 36"
34.	*A3152	2	Hose Assembly, 3/8" x 62"
35.	*A1098	2	Hose Assembly, 3/8" x 26"
36.	G6801-L-10	2	Long Elbow W/O-Ring, 90°, 7/8"-14 Male JIC To O-Ring
	GR1466	-	O-Ring
37.	*A1073	2	Hose Assembly, 3/8" x 18"
38.	G2403-08	2	Union, 3/4"-16 Male JIC

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HYDRAULIC HOSES AND FITTINGS ON PLANTER FRAME

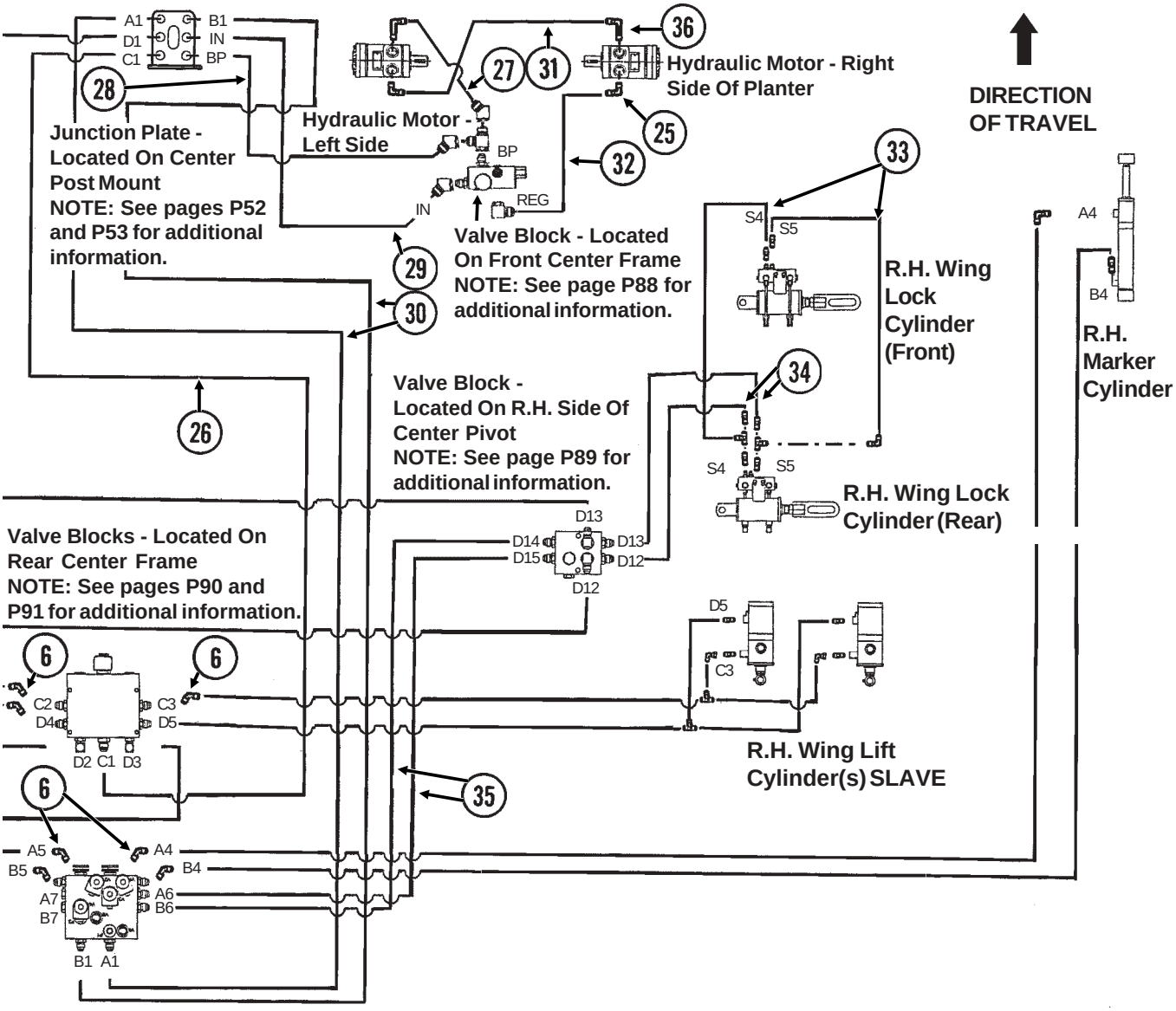
(TWL207a)

16 Row 30" Shown (Two Wing Lift Cylinders Per Wing)
12 Row 30" (One Wing Lift Cylinder Per Wing)



ITEM	PART NO.	QTY.	DESCRIPTION
1.	G6801-08	6	Elbow W/O-Ring, 90°, 3/4"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
2.	G6400-08-04	2	Connector W/O-Ring, 3/4"-16 Male JIC To 7/16"-20 O-Ring
	GR1465	-	O-Ring
3.	*A3220	4	Hose Assembly, 3/8" x 82", 12 Row 30"
	*A3219	-	Hose Assembly, 3/8" x 104", 16 Row 30"
4.	*A3101	4	Hose Assembly, 3/8" x 168", 12 Row 30"
	*A3161	-	Hose Assembly, 3/8" x 210", 16 Row 30"
5.	G2603-08	4	Tee, 3/4"-16 Male JIC
6.	G6502-08	9	Swivel Elbow, 45°, 3/4"-16 Male JIC To Female
7.	G6400-L-08	2-4	Long Connector W/O-Ring, 3/4"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
8.	G6500-08	2-4	Swivel Elbow, 90°, 3/4"-16 Male JIC To Female
9.	G6400-08	6-8	Connector W/O-Ring, 3/4"-16 Male JIC To O-Ring
	GR1037	-	O-Ring
10.	*A1018	4	Hose Assembly, 3/8" x 40"
11.	*A3218	4	Hose Assembly, 3/8" x 8"
12.	G6602-08	4	Swivel Tee, 3/4"-16 JIC
13.	G2406-08-06	4	Reducer, 3/4"-16 Female JIC To 9/16"-18 Male JIC
14.	G6400-06-08	4	Connector W/O-Ring, 9/16"-18 Male JIC To 3/4"-16 O-Ring
	GR1037	-	O-Ring
15.	*A3153	1	Hose Assembly, 3/8" x 22"
16.	*A1054	4	Hose Assembly, 3/8" x 204", 12 Row 30"
	*A3163	-	Hose Assembly, 3/8" x 225", 16 Row 30"
17.	*A1008	2	Hose Assembly, 3/8" x 110"
18.	*A1021	1	Hose Assembly, 3/8" x 56"
19.	*A3128	1	Hose Assembly, 3/8" x 52"

HYDRAULIC HOSES AND FITTINGS ON PLANTER FRAME

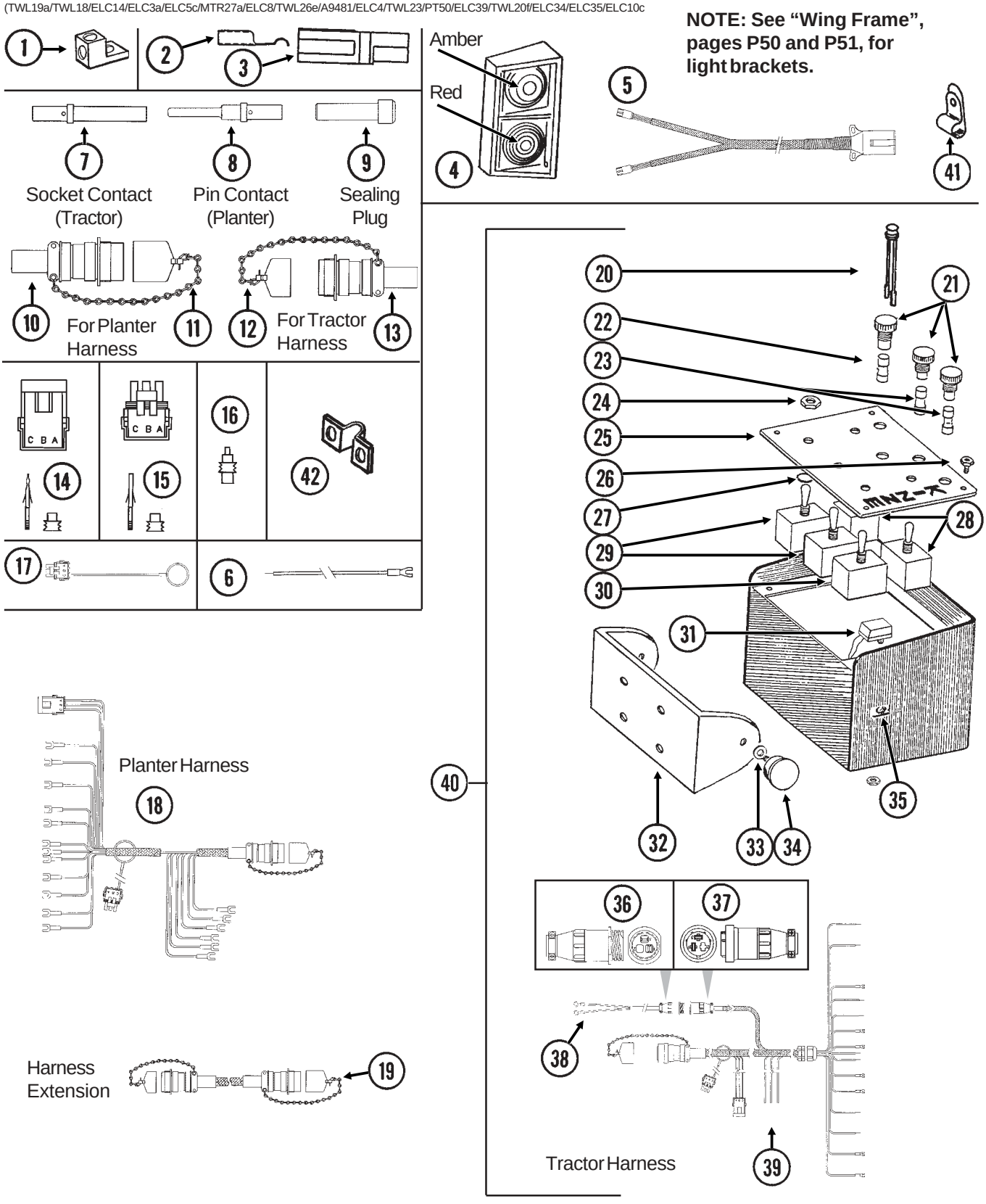


ITEM	PART NO.	QTY.	DESCRIPTION
20.	G306-08	3	Lock Nut, 3/4"-16
21.	G2700-08	2	Bulkhead Tube Union, 3/4"-16 Male JIC
22.	*A1076	1	Hose Assembly, 3/8" x 30"
23.	*A8215	1	Hose Assembly, 1/2" x 87"
24.	G2403-08	2	Union, 3/4"-16 Male JIC
25.	G6801-10	2	Elbow W/O-Ring, 90°, 7/8"-14 Male JIC To O-Ring
	GR1466	-	O-Ring
26.	*A1464	1	Hose Assembly, 1/2" x 72"
27.	*A3329	1	Hose Assembly, 3/4" x 29"
28.	*A3330	1	Hose Assembly, 3/4" x 107"
29.	*A8214	1	Hose Assembly, 1/2" x 107"
30.	*A1053	2	Hose Assembly, 3/8" x 72"
31.	*A1457	1	Hose Assembly, 1/2" x 51"
32.	*A1424	1	Hose Assembly, 1/2" x 30"
33.	*A1189	4	Hose Assembly, 1/4" x 36"
34.	*A3152	2	Hose Assembly, 3/8" x 62"
35.	*A1098	2	Hose Assembly, 3/8" x 26"
36.	G6801-L-10	2	Long Elbow W/O-Ring, 90°, 7/8"-14 Male JIC To O-Ring
	GR1466	-	O-Ring
37.	*A1073	2	Hose Assembly, 3/8" x 18"

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ELECTRICAL COMPONENTS

(TWL19a/TWL18/ELC14/ELC3a/ELC5c/MTR27a/ELC8/TWL26e/A9481/ELC4/TWL23/PT50/ELC39/TWL20f/ELC34/ELC35/ELC10c



ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA3584	-	Ground Clamp
2.	GD9530	-	Contact
3.	GD9529	-	Housing, Black
	GD12726	-	Housing, Red

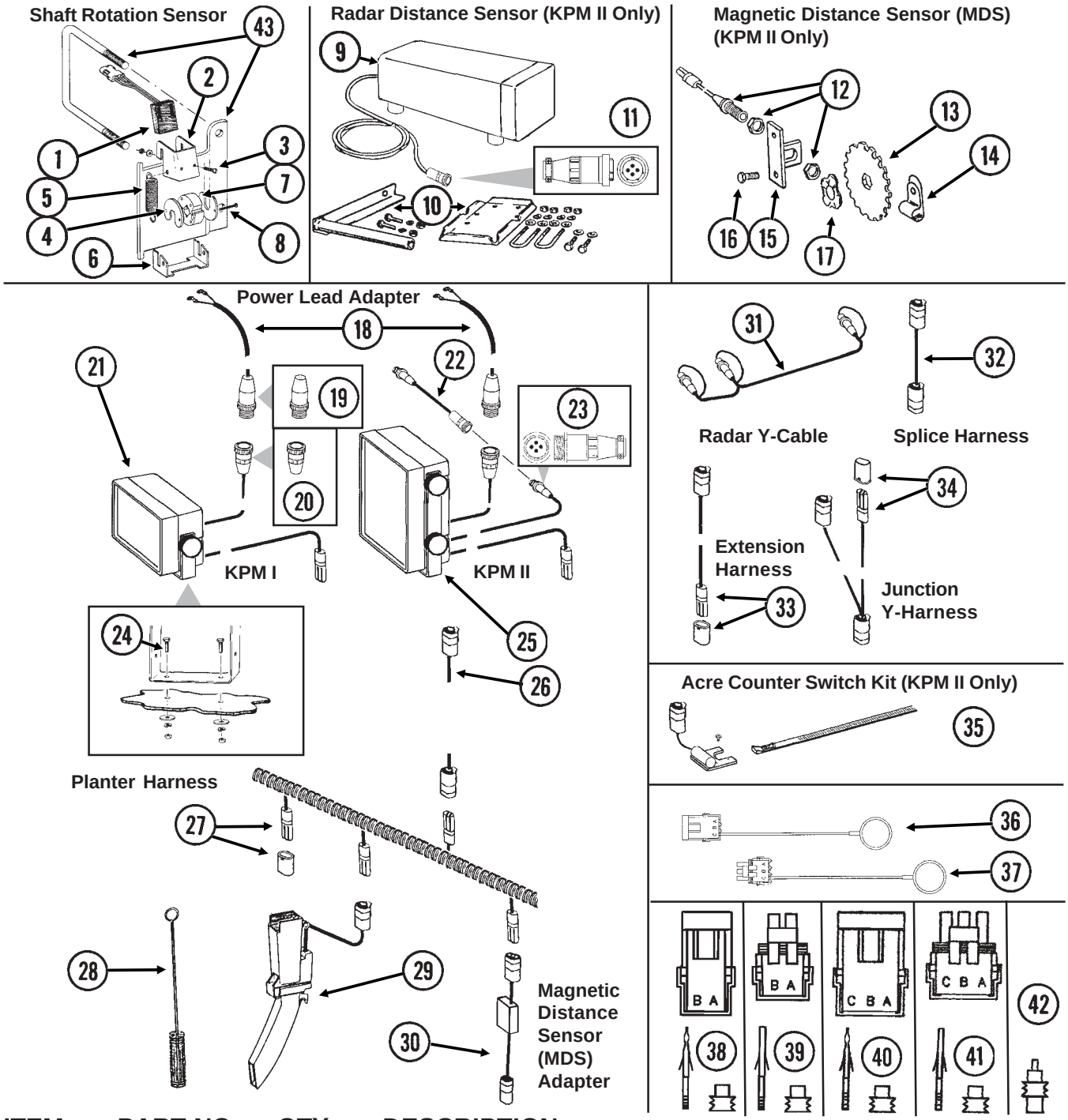
ELECTRICAL COMPONENTS

ITEM	PART NO.	QTY.	DESCRIPTION
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.	GA9202	-	Wiring Harness W/7 Terminal Female Connector, 786" (2 Light Connections), 12 Row 30"
	GA9204	-	Wiring Harness W/7 Terminal Female Connector, 882" (2 Light Connections), 16 Row 30"
	GA5385	-	7 Terminal Female Connector
6.	GA9481	-	Jumper Wire W/Fork Terminal, 13"
	G10996	-	Fork Terminal
7.	GD8740	-	Socket Contact, No. 14
8.	GD8741	-	Pin Contact, No. 14
9.	GD8739	-	Sealing Plug, No. 12
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, Includes: (3) 3-Pin Female Housings, (9) Pin Contacts, (9) Seals
15.	G1K252	-	3-Pin Male Connector Kit, Includes: (3) 3-Pin Male Housings, (9) Socket Contacts, (9) Seals
16.	GD11089	-	Sealing Plug
17.	GA8047	-	Dust Plug
18.	GA9112	1	Wiring Harness W/Dust Cap, 516", 12 Row 30"
	GA9113	-	Wiring Harness W/Dust Cap, 636", 16 Row 30"
19.	GA7399	-	Harness Extension W/Dust Caps, 15'
20.	GA7077	1-4	Indicator Light
21.	GA2612	3-5	Fuse Holder W/Spade, 1 $^{33}/_{50}$"
	GR1628	-	Fuse Holder W/Spade, 1 $^{39}/_{50}$"
22.	GD2829	1-2	Fuse, 15 Amp, Type AGC
23.	GD10243	2-6	Fuse, MOL 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)
	GA8735	-	Cover Plate, Planters Equipped With Two-Speed Point Row Clutch
26.	GR1292	4	Pan Head Screw, No. 8-32 x $^{1}/_{2}$"
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, $^{1}/_{4}$" SAE
34.	GA6975	2	Knob
35.	GR1290	2	Cage Nut, $^{1}/_{4}$"-20
36.	G1K267	-	Power Lead Adapter 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
	G7639X	-	Backlit Control Console Assembly W/Mounting Brackets, Short Harness W/Dust Cap And Power Cable, Planters Equipped With Two-Speed Point Row Clutch
41.	GD6291	-	Insulated Clamp, $^{3}/_{8}$"
	GD13348	-	Insulated Clamp, $^{11}/_{16}$"
42.	GD13310	-	Jumper

NOTE: See "Point Row Clutch" or "Two-Speed Point Row Clutch" for R.H. and L.H. Wiring Harness for the point row clutches. See "KPM I/KPM II/KPM II Stack-Mode Electronic Seed Monitor" for those components.

KPM I/KPM II ELECTRONIC SEED MONITOR

(MTR42a/MTR27zz)



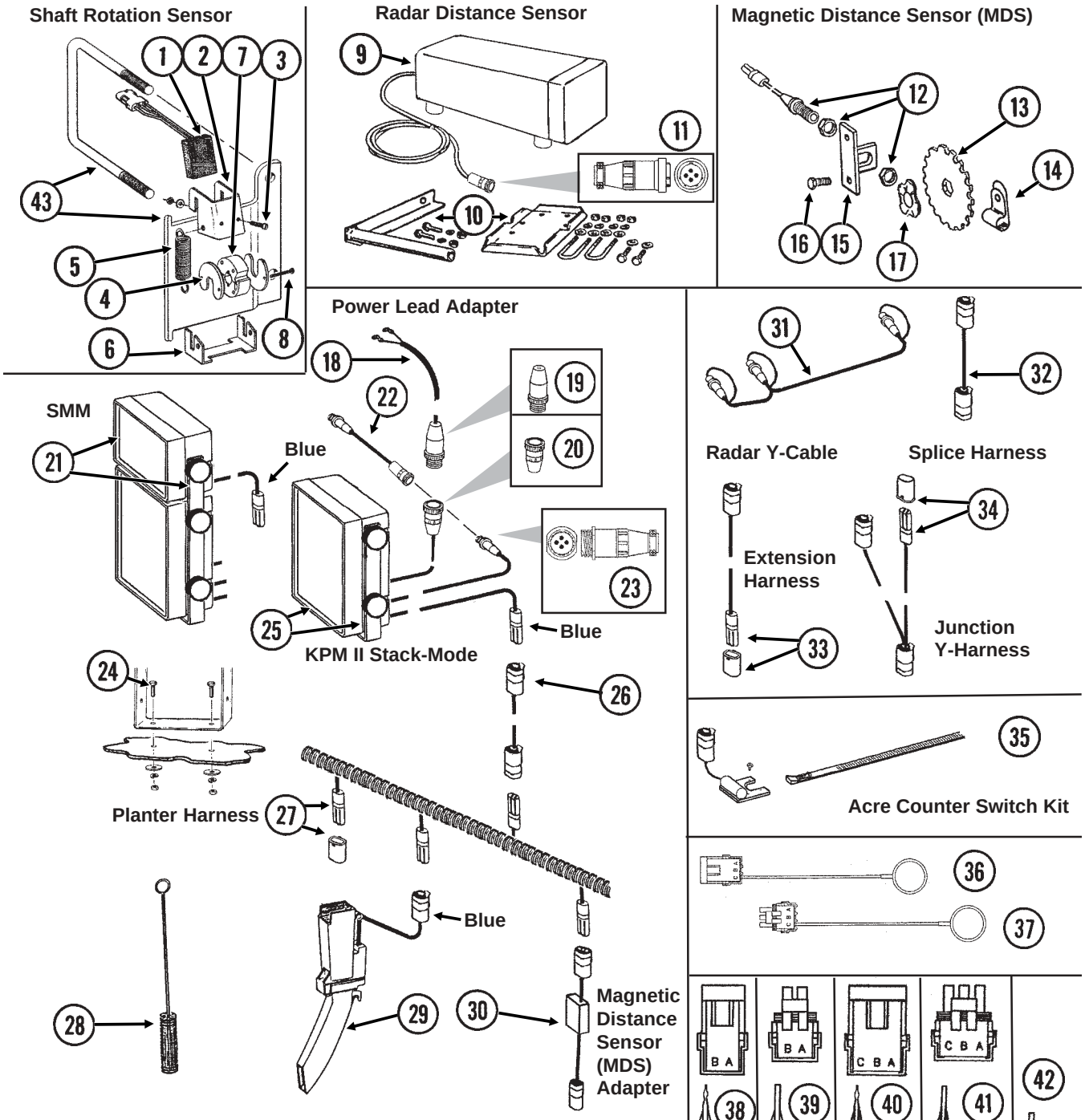
ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR1415	1	Rotation Sensor
2.	GD11169	1	Mount
3.	G10757	2	Pan Head Screw, No. 10-32 x 1 1/4"
	G10243	2	Washer, No. 10 SAE
	G10758	2	Hex Nut, No. 10-32
4.	GD11474	2	Cover
5.	GD5857	2	Spring
6.	GD11170	1	Spring Mount
7.	GR1414	1	Actuator
8.	G10927	2	Pan Head Machine Screw, No. 8-32 x 1 1/4", Stainless Steel
	G10931	2	Lock Washer, No. 8, Internal/External, Stainless Steel
	G10928	2	Hex Nut, No. 8-32, Stainless Steel

KPM I/KPM II ELECTRONIC SEED MONITOR

ITEM	PART NO.	QTY.	DESCRIPTION
9.	GA7858	-	Radar Distance Sensor W/20' Cable
10.	GA8026	-	Radar Sensor Pipe/Mounting Bracket Package
11.	G1K323	-	4-Pin Connector Kit W/Female Housing, 4 Pins And Cable Clamp
12.	GA5600	1	Magnetic Distance Sensor
13.	GD8751	-	Magnetic Distance Sensor Pulse Wheel
14.	GD6291	-	Insulated Clamp, 3/8"
15.	GD8770	1	Bracket
16.	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
17.	GD8771	1	Spring Wave Washer
18.	GA7856	1	Power Lead Adapter
19.	G1K267	-	Power Lead Adapter Connector Kit, Includes: (1) Cable Clamp, (1) 3-Pin Connector, (3) Male Terminal Pins
20.	G1K268	-	Console Cable Connector Kit, Includes: (1) Cable Clamp, (1) 3-Pin Connector, (1) Lock Ring, (3) Female Terminal Pins
21.	GA8680	1	KPM I Backlit Console W/Mounting Bracket, Power Lead Adapter (Item 18), Brush (Item 28) And Dust Plug (Item 36)
	GR1390	-	Mounting Bracket, KPM I
	GR1392	-	Console Mounting Bracket Hardware Package (Includes 2 Knobs And 1/4" Hardware)
22.	GA9144	-	Monitor/Radar Adapter, 10"
23.	G1K322	-	4-Pin Connector Kit W/Male Housing, 4 Female Socket Contacts And Cable Clamp
24.	G10022	2	Hex Head Cap Screw, 1/4"-20 x 1/2"
	G10211	2	Washer, 1/4" SAE
	G10227	2	Lock Washer, 1/4"
	G10103	2	Hex Nut, 1/4"-20
25.	GA9393	-	KPM II Backlit Console W/Mounting Bracket, Power Lead Adapter (Item 18), Brush (Item 28), Dust Plug (Item 36) And Monitor/Radar Adapter, 10" (Item 22)
	GR1391	-	Mounting Bracket, KPM II
	GR1393	-	Console Mounting Bracket Hardware Package (Includes 4 Knobs And 1/4" Hardware)
26.		-	Included In Tractor/Planter Wiring Harnesses, See Items 18 And 39, Pages P102 And P103
27.	GA7851	-	Planter Harness W/Dust Caps, 12 Row (16 Connectors)
	GA7852	-	Planter Harness W/Dust Caps, 16 Row (20 Connectors)
	GD11993	-	Dust Cap
28.	GR0594	-	Brush
29.	GA8495	-	Seed Tube W/Computerized Sensor
	GR1395	-	Sensor Only
	GR1461	-	Seed Tube (With Holes For Computerized Sensor Installation)
	GD2117	-	Tie Strap, 14 1/2"
30.	GA7859	1	Magnetic Distance Sensor Adapter (Analog To Digital)
31.	GR0586	1	Radar Y-Cable (Used To Connect Radar Distance Sensor For Multiple Functions)
32.	GA7857	-	Splice Harness, 1'
33.	GA7854	-	Extension Harness W/Dust Cap, 15'
	GA7855	-	Extension Harness W/Dust Cap, 30'
	GD11993	-	Dust Cap
34.	GA7853	-	Junction Y-Harness W/Dust Cap
	GD11993	-	Dust Cap
35.	G1K249	-	Acre Counter Switch Kit (Used W/KPM II Console Only)
36.	GA8046	-	Dust Plug (Black)
37.	GA8047	-	Dust Plug (Black)
38.	G1K321	-	2-Pin Female Connector Kit (Black), Includes: (3) 2-Pin Female Housings, (6) Pin Contacts, (6) Seals
39.	G1K320	-	2-Pin Male Connector Kit (Black), Includes: (3) 2-Pin Male Housings, (6) Socket Contacts, (6) Seals
40.	G1K248	-	3-Pin Female Connector Kit (Black), Includes: (3) 3-Pin Female Housings, (9) Pin Contacts, (9) Seals
41.	G1K252	-	3-Pin Male Connector Kit (Black), Includes: (3) 3-Pin Male Housings, (9) Socket Contacts, (9) Seals
42.	GD11089	-	Sealing Plug
43.	G1K364	-	Rotation Sensor Mount Kit, Includes: (2) Mounts, (2) GD1113 5" x 7" U-Bolts, (4) 10230 Lock Washers, (4) G10104 Hex Nuts, (1) Instruction
A.	GA6147	-	Magnetic Distance Sensor And Mounting Package (Items 12-17)

KPM II STACK-MODE ELECTRONIC SEED MONITOR

(MTR43)



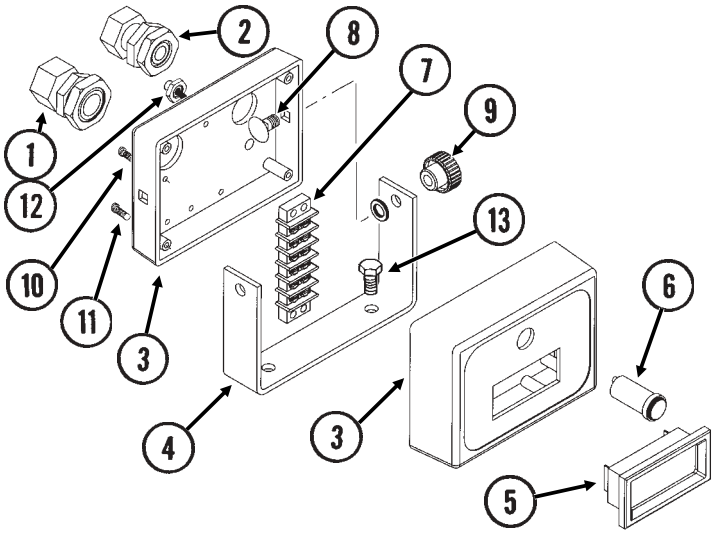
ITEM	PART NO.	QTY.	DESCRIPTION
1.	GR1415	1	Rotation Sensor
2.	GD11169	1	Mount
3.	G10757	2	Pan Head Screw, No. 10-32 x 1 1/4"
	G10243	2	Washer, No. 10 SAE
	G10758	2	Hex Nut, No. 10-32
4.	GD11474	2	Cover
5.	GD5857	2	Spring
6.	GD11170	1	Spring Mount
7.	GR1414	1	Actuator
8.	G10927	2	Pan Head Machine Screw, No. 8-32 x 1 1/4", Stainless Steel
	G10931	2	Lock Washer, No. 8, Internal/External, Stainless Steel
	G10928	2	Hex Nut, No. 8-32, Stainless Steel
9.	GA7858	-	Radar Distance Sensor W/20' Cable
10.	GA8026	-	Radar Sensor Pipe/Mounting Bracket Package

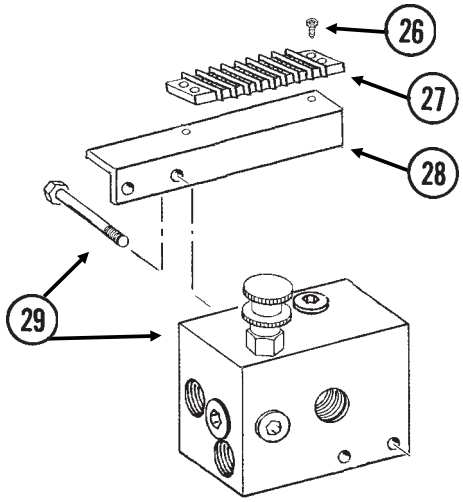
KPM II STACK-MODE ELECTRONIC SEED MONITOR

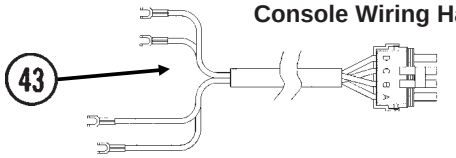
ITEM	PART NO.	QTY.	DESCRIPTION
11.	G1K323	-	4-Pin Connector Kit W/Female Housing, 4 Pins And Cable Clamp
12.	GA5600	1	Magnetic Distance Sensor
13.	GD8751	-	Magnetic Distance Sensor Pulse Wheel
14.	GD6291	-	Insulated Clamp, 3/8"
15.	GD8770	1	Bracket
16.	G10004	2	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
	G10229	2	Lock Washer, 3/8"
	G10101	2	Hex Nut, 3/8"-16
17.	GD8771	1	Spring Wave Washer
18.	GA7856	1	Power Lead Adapter
19.	G1K267	-	Power Lead Adapter Connector Kit, Includes: (1) Cable Clamp, (1) 3-Pin Connector, (3) Male Terminal Pins
20.	G1K268	-	Console Cable Connector Kit, Includes: (1) Cable Clamp, (1) 3-Pin Connector, (1) Lock Ring, (3) Female Terminal Pins
21.	GA9857	1	SMM Backlit Console W/Mounting Bracket And Dust Plug (Item 36)
	GR1631	-	Mounting Bracket, KPM II Stack-Mode And SMM Consoles
	GR1632	-	Console Mounting Bracket Hardware Package (Includes 2 Knobs And 1/4" Hardware)
22.	GA9144	-	Monitor/Radar Adapter, 10"
23.	G1K322	-	4-Pin Connector Kit W/Male Housing, 4 Female Socket Contacts And Cable Clamp
24.	G10022	2	Hex Head Cap Screw, 1/4"-20 x 1/2"
	G10211	2	Washer, 1/4" SAE
	G10227	2	Lock Washer, 1/4"
	G10103	2	Hex Nut, 1/4"-20
25.	GA9858	-	KPM II Stack-Mode Backlit Console W/Mounting Bracket, Power Lead Adapter (Item 18), Brush (Item 28), Dust Plug (Item 36) And Monitor/Radar Adapter, 10" (Item 22)
	GR1391	-	Mounting Bracket, KPM II
	GR1393	-	Console Mounting Bracket Hardware Package (Includes 4 Knobs And 1/4" Hardware)
26.		-	Included In Tractor/Planter Wiring Harnesses, See Items 18 And 39, Pages P102 And P103
27.	GA7851	-	Planter Harness W/Dust Caps, 12 Row (16 Connectors)
	GA8052	-	Planter Harness W/Dust Caps, 16 Row (20 Connectors)
	GD11993	-	Dust Cap
28.	GR0594	-	Brush
29.	GA9847	-	Seed Tube W/Computerized Sensor (KPM II Stack-Mode)
	GR1629	-	Sensor Only (KPM II Stack-Mode)
	GR1461	-	Seed Tube (With Holes For Computerized Sensor Installation)
	GD2117	-	Tie Strap, 14 1/2"
30.	GA7859	1	Magnetic Distance Sensor Adapter (Analog To Digital)
31.	GR0586	1	Radar Y-Cable (Used To Connect Radar Distance Sensor For Multiple Functions)
32.	GA7857	-	Splice Harness, 1'
33.	GA7854	-	Extension Harness W/Dust Cap, 15'
	GA7855	-	Extension Harness W/Dust Cap, 30'
	GD11993	-	Dust Cap
34.	GA7853	-	Junction Y-Harness W/Dust Cap
	GD11993	-	Dust Cap
35.	G1K249	-	Acre Counter Switch Kit
36.	GA8046	-	Dust Plug (Black)
	GA9978	-	Dust Plug (Blue)
37.	GA8047	-	Dust Plug (Black)
	GA9979	-	Dust Plug (Blue)
38.	G1K321	-	2-Pin Female Connector Kit (Black), Includes: (3) 2-Pin Female Housings, (6) Pin Contacts, (6) Seals
39.	G1K320	-	2-Pin Male Connector Kit (Black), Includes: (3) 2-Pin Male Housings, (6) Socket Contacts, (6) Seals
40.	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
41.	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
42.	GD11089	-	Sealing Plug
43.	G1K364	-	Rotation Sensor Mount Kit, Includes: (2) Mounts, (2) GD1113 5" x 7" U-Bolts, (4) G10230 Lock Washers, (4) G10104 Hex Nuts, (1) Instruction
A.	GA6147	-	Magnetic Distance Sensor And Mounting Package (Items 12-17)

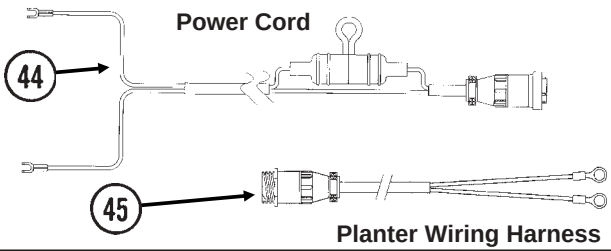
BULK SEED HOPPER MONITOR

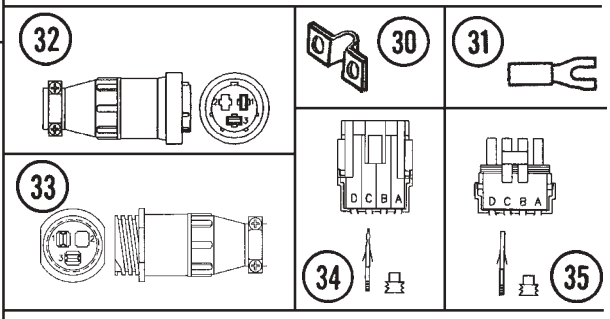
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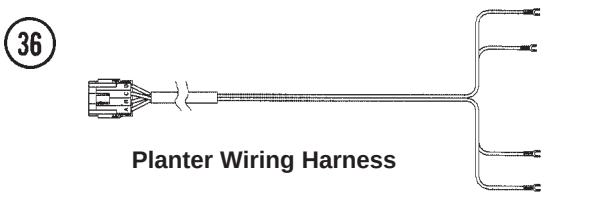


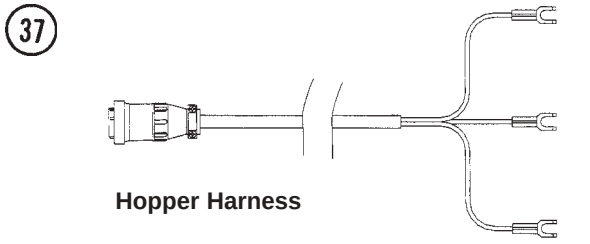


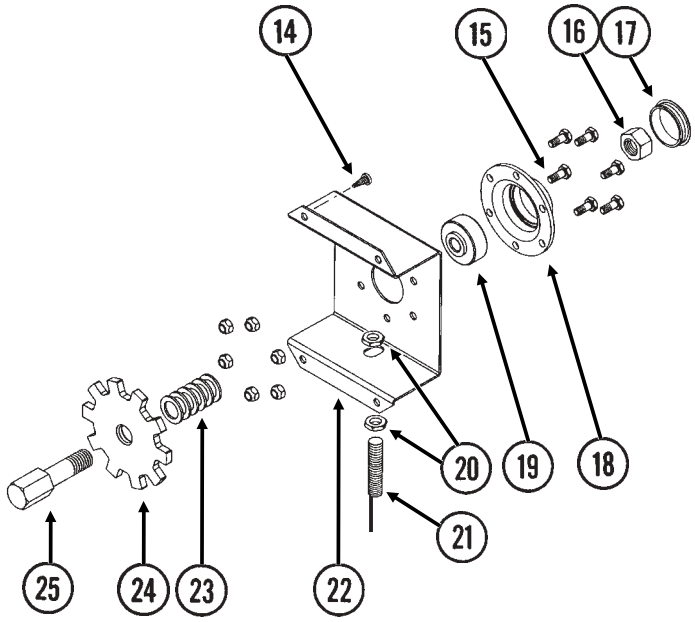


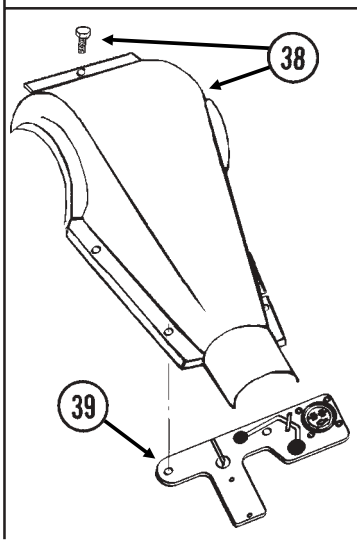


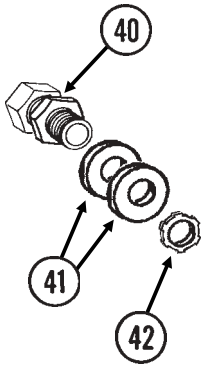












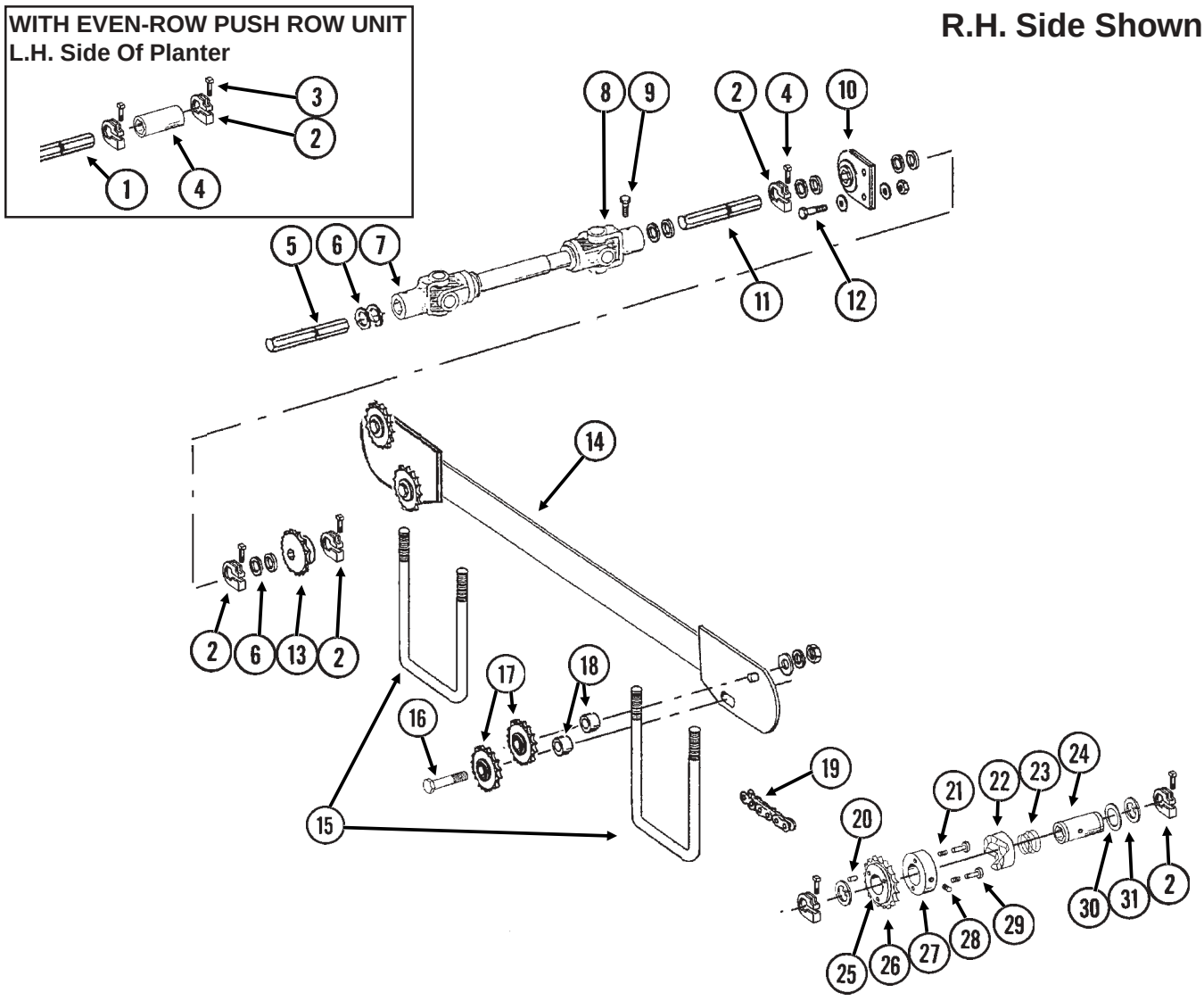
BULK SEED HOPPER MONITOR

ITEM	PART NO.	QTY.	DESCRIPTION
1.	GA9963	1	Strain Relief W/1 1/16" Lock Nut And 15/16" Hex Nut
2.	GA9964	1	Strain Relief W/15/16" Lock Nut And 7/8" Hex Nut
3.	GA9962	1	Console Box
4.	GD14259	1	Bracket
5.	GA9965	1	Tachometer Meter
6.	GA9959	1	Red Light Assembly
7.	GA9960	1	Terminal Strip W/Screws, No. 5, 6 Terminal
	GR1635	-	Screw, No. 6 x 1/4"
8.	G11059	2	Carriage Bolt, 1/4"-20 x 1/2", Grade 2
	GD14261	2	Nylon Washer
9.	GA9958	2	Knob
10.	G11069	5	Flat Head Slotted Machine Screw, No. 4-40 x 3/8"
11.	G11070	4	Pan Head Machine Screw, No. 4 x 3/8"
12.	GA10021	1	Switch, Push Button
13.	G10022	2	Hex Head Cap Screw, 1/4"-20 x 1/2"
	G10211	2	Washer, 1/4" SAE
	G10227	2	Lock Washer, 1/4"
	G10103	2	Hex Nut, 1/4"-20
14.	G11062	4	Sheet Metal Screw, 1/4"-14 x 1/2"
15.	G10020	6	Hex Head Cap Screw, 1/4"-20 x 5/8", Grade B
	G10110	6	Lock Nut, 1/4"-20, Grade B
16.	G10104	1	Hex Nut, 5/8"-11
17.	GD11845	1	Hub Cap
18.	GD10473	1	Bearing Housing
19.	GA2014	1	Bearing
20.	GD14257	2	Nut, M12 x 1"
21.	GA9954	1	Speed Sensor Assembly
22.	GD14254	1	Bracket
23.	G10918	6	Machine Bushing, 5/8", 14 Gauge
24.	GD14255	1	Sensor Wheel
25.	GD14256	1	Speed Sensor Shaft
26.	G11002	2	Slotted Pan Head Machine Screw, No. 8-32 x 3/4", Stainless Steel
	G10251	2	Hex Nut, No. 8-32
27.	GA9098	1	Terminal Strip W/Screws, No. 6, 8 Terminal
	GR1635	-	Screws, No. 6 x 1/4"
28.	GD14266	1	Bracket
29.		-	See “Valve Block - Located On Front Center Frame”, Page P88
30.	GD13310	3	Jumper
31.	G10996	-	Fork Terminal
32.	G1K268	-	Console Cable Connector Kit, Includes: (1) 3-Pin Connector, (1) Cable Clamp, (1) Lock Ring, (3) Female Terminal Pins
33.	G1K267	-	Power Cable Connector Kit, Includes: (1) 3-Pin Connector, (1)Cable Clamp, (3) Male Terminal Pins
34.	GA8328	-	4-Pin Female Connector W/Female Housing, 4 Pin Contacts And 4 Seals
35.	GA8329	-	4-Pin Male Connector W/Male Housing, 4 Socket Contacts And 4 Seals
36.	GA9951	1	Wiring Harness, 564"
37.	GA9952	2	Hopper Harness, 84"
38.		-	See “Bulk Seed Hopper Auger Manifold Assembly”, Pages P19 And P19
39.	GA9953	2	Seed Flow Sensor Assembly
40.	GD14270	2	Power Cable Connector
41.	G10235	4	Machine Bushing, 7/8", 14 Gauge
42.	GD4163	2	Lock Nut, 1/2" Conduit
43.	GA9957	1	Wiring Harness, 156"
44.	GA9955	1	Power Cord W/Fuse Holder And Fuse
	GD14258	-	Fuse Holder
	GD14269	-	Fuse, 1 Amp, Type AGC
45.	GA7856	1	Power Lead Adapter
A.	GA9961	-	Monitor Console Assembly (Items 1-12 And 43 And 44)

INTERPLANT® PUSH ROW UNIT DRIVE

(TWL33d)

R.H. Side Shown



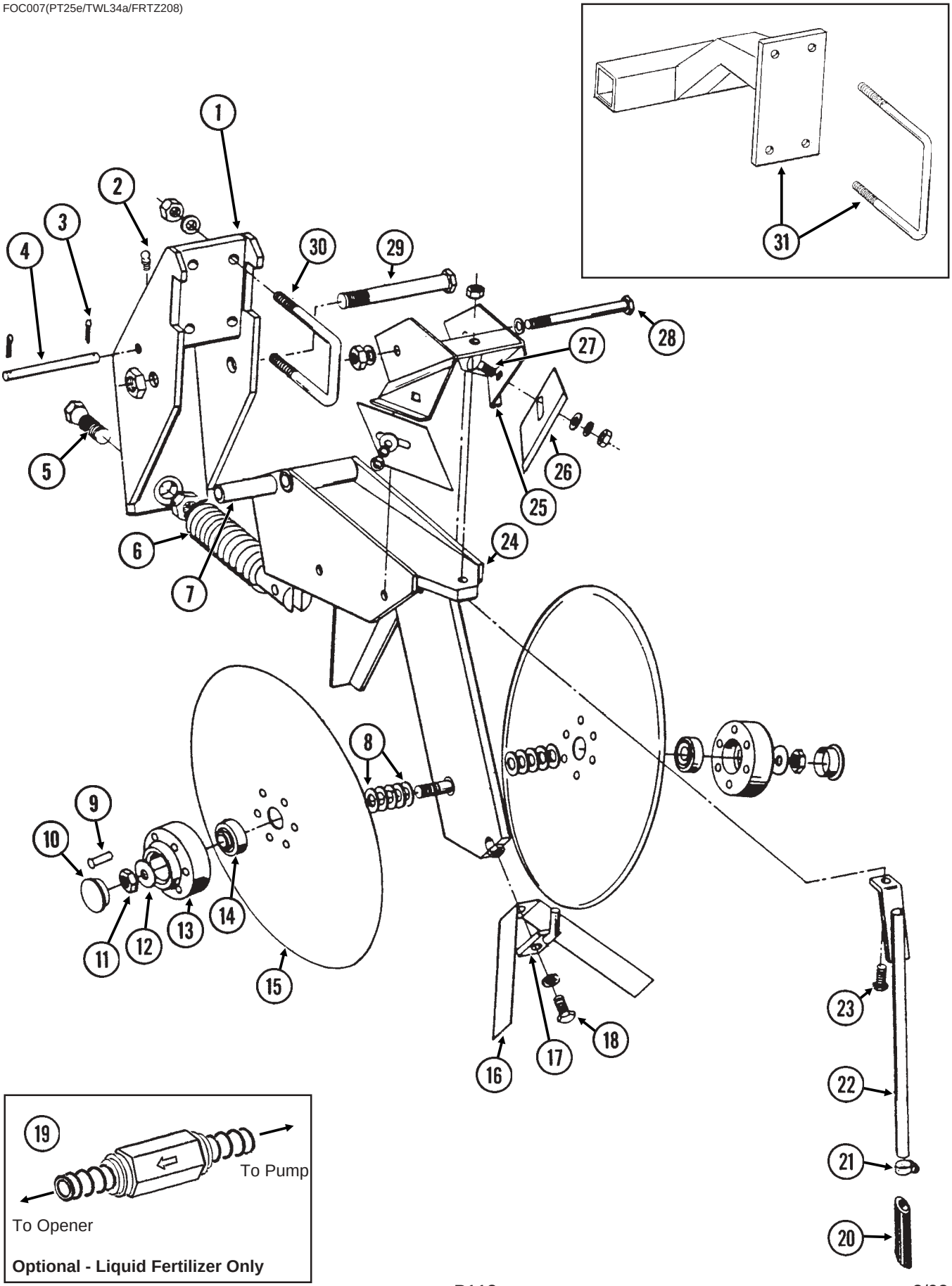
ITEM	PART NO.	QTY. (Per Side)	DESCRIPTION
1.	GD0914-30	1	Hex Shaft, 7/8" x 30" (No Holes), W/Even-Row Push Row Unit
2.	GD11045	-	Lock Clamp

INTERPLANT® PUSH ROW UNIT DRIVE

ITEM	PART NO.	QTY. (Per Side)	DESCRIPTION
3.	G10130	-	Square Head Machine Bolt, 5/16"-18 x 1 3/4"
	G10923	-	Flange Nut, 5/16"-18, No Serration
4.	GD1719	1	Coupler, 4"
5.	GD0914-48	1	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.	G10233	-	Machine Bushing, 1", 10 Gauge (As Required)
7.	GA7052	1	U-Joint W/Grease Fitting, Female, 10 1/4" Long
	GR1557	-	Grease Fitting, 45°, Metric
	GR1297	-	Inboard Yoke And Outer Profile
	GR1294	-	Cross And Bearing Kit
	GR1293	-	Yoke, 7/8" Hex
8.	GA7051	1	U-Joint W/Grease Fitting, Male, 12 1/4" 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, 7/8" Hex
9.	G10688	2	Square Head Set Screw, 3/8"-16 x 5/8"
10.	GA2180	-	Hanger Bearing, 7/8" Hex Bore
11.	GD0914-66	1	Hex Shaft, 7/8" x 66" (No Holes), R.H. Side, 12 Row 30"
	GD0914-76	-	Hex Shaft, 7/8" x 76" (No Holes), L.H. Side, 12 Row 30"
	GD0914-124	-	Hex Shaft, 7/8" x 124" (No Holes), R.H. Side, 16 Row 30"
	GD0914-138	-	Hex Shaft, 7/8" x 138" (No Holes), L.H. Side, 16 Row 30"
12.	G10004	-	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
	G10210	-	Washer, 3/8" USS
	G10229	-	Lock Washer, 3/8"
	G10101	-	Hex Nut, 3/8"-16
13.	GA5107	1	Sprocket, 19 Tooth
14.	GA9138	1	Mount
15.	GD8306	2	U-Bolt, 7" x 5" x 1/2"-13
	G10228	4	Lock Washer, 1/2"
	G10102	4	Hex Nut, 1/2"-13
16.	G10581	4	Hex Head Cap Screw, 1/2"-13 x 2 1/4"
	G10206	4	Washer, 1/2" SAE
	G10228	4	Lock Washer, 1/2"
	G10102	4	Hex Nut, 1/2"-13
17.	GA7154	4	Sprocket W/Bearing, 18 Tooth
18.	GD9229	4	Spacer, 1 1/4" O.D. x 1/2" Long
19.	G3310-222	1	Chain, No. 40, 222 Pitch Including Connector Link
	GR0912	-	Connector Link, No. 40
20.	G10968	1	Spring Pin, 5/32" x 7/16"
21.	GR1413	1	Spring
22.	GR1409	1	Knurled Collar
23.	GR1408	1	Compression Spring
24.	GR1407	1	Drive Shaft
25.	GR1406	1	Bushing
26.	GR1412	1	Sprocket, 19 Tooth
27.	GR1405	1	Lock Collar
28.	G10535	1	Hex Socket Set Screw, 3/8"-16 x 3/4"
29.	GR1410	1	Pin
30.	GR1411	1	Shim
31.	G10496	2	External Inverted Snap Ring, 1 1/2"
A.	GA8092	-	Clutch Sprocket Assembly, 19 Tooth (Items 20-31)
B.	G1K269	-	Lock Clamp Kit (Items 2 And 3)

DOUBLE DISC FERTILIZER OPENER AND MOUNT

FOC007(PT25e/TWL34a/FRTZ208)

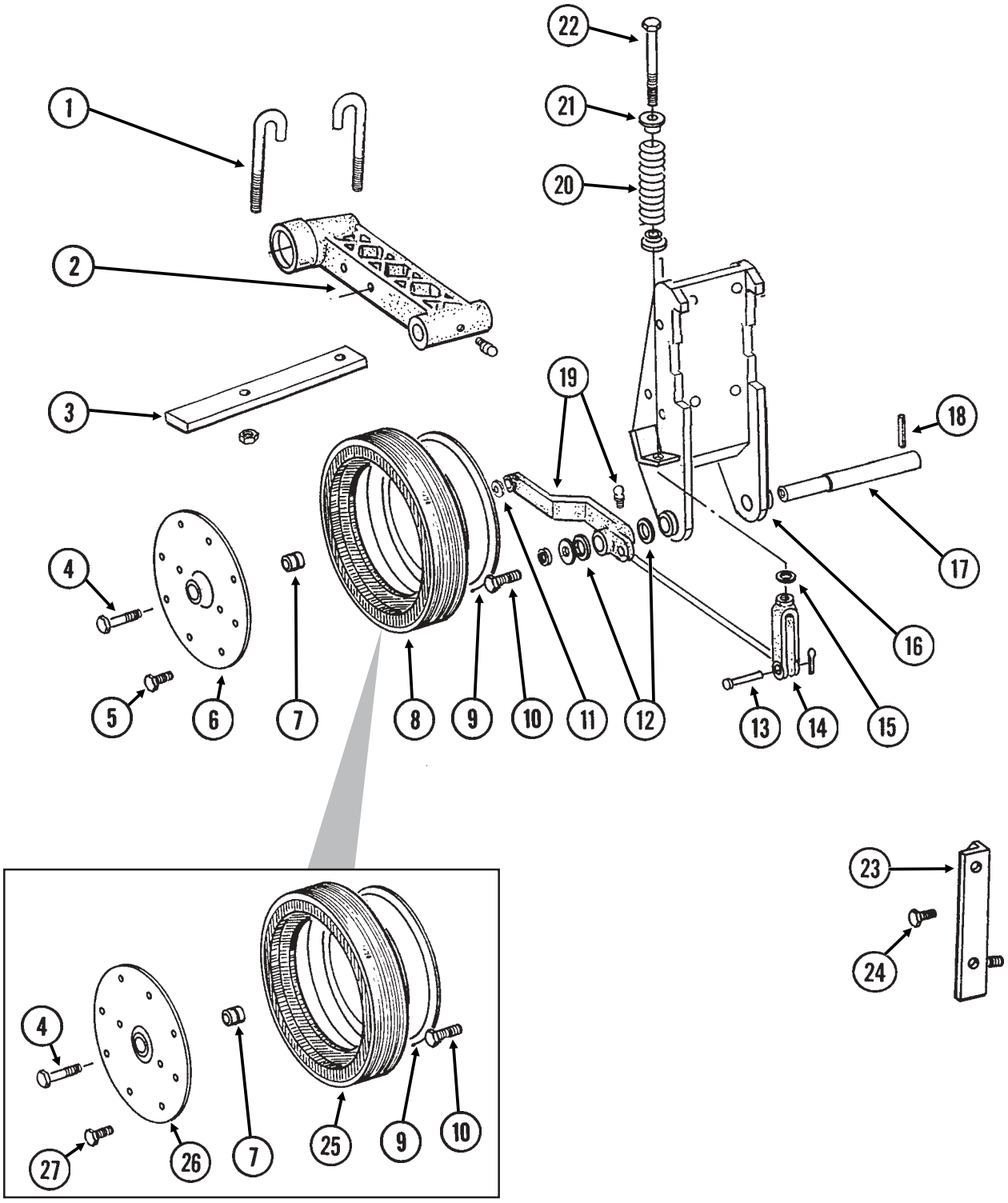


DOUBLE DISC FERTILIZER OPENER AND MOUNT

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GA8483	1	Bracket
2.	G10938	1	Grease Fitting, 1/4"-28, Taper Thread
3.	G10451	2	Cotter Pin, 1/8" x 1"
4.	GD1657	1	Lockup Pin
5.	GD0962	1	Hex Head Adjusting Bolt, 5/8"-18 x 3 1/4"
	G10499	1	Hex Jam Nut, 5/8"-18, Grade 2
6.	GA0328	1	Spring
7.	GD0487	1	Bushing, 41/64" I.D. x 3 1/2" Long
8.	G10213	-	Machine Bushing, 5/8" (.030" Thick)
9.	G10542	12	Rivet, 1/4" x 1 5/16"
10.	GD1132	2	Dust Cap
11.	G10503	1	Hex Jam Nut, 5/8"-11, Grade 2
	G10504	1	Hex Jam Nut, 5/8"-11, L.H. Thread, Grade 2
12.	G10204	2	Special Machine Bushing, 5/8" x 1" O.D.
13.	GB0134	2	Hub
14.	GA2014	2	Bearing
15.	GD11306	2	Disc Blade, 3.5mm 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.	GA8983	-	Check Valve, Low Rate
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 1/2"
	G10221	1	Washer, 5/16" SAE
	G10109	1	Lock Nut, 5/16"-18
24.	GA9195	1	Shank
25.	GA0810	1	Scraper Mount
26.	GD1673	2	Scraper
27.	G10305	2	Carriage Bolt, 3/8"-16 x 1"
	G10210	2	Washer, 3/8" USS
	G10229	2	Lock Washer, 3/8"
	G10101	2	Hex Nut, 3/8"-16
28.	G10045	1	Hex Head Cap Screw, 1/2"-13 x 4 1/2"
	G10111	1	Lock Nut, 1/2"-13
29.	G10046	1	Hex Head Cap Screw, 5/8"-11 x 5"
	G10107	1	Lock Nut, 5/8"-11
30.	GD1138	2	U-Bolt, 2 1/2" x 2 1/2" x 1/2"-13
	G10228	4	Lock Washer, 1/2"
	G10102	4	Hex Nut, 1/2"-13
31.	GA7135	1	Mount W/U-Bolts
	GD1113	2	U-Bolt, 5" x 7" x 5/8"-11
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
A.	GA8845	-	Disc Blade And Bearing Assembly (Items 9 And 13-15)

HD SINGLE DISC FERTILIZER OPENER (Soil Press Wheel)

(TWL35b)

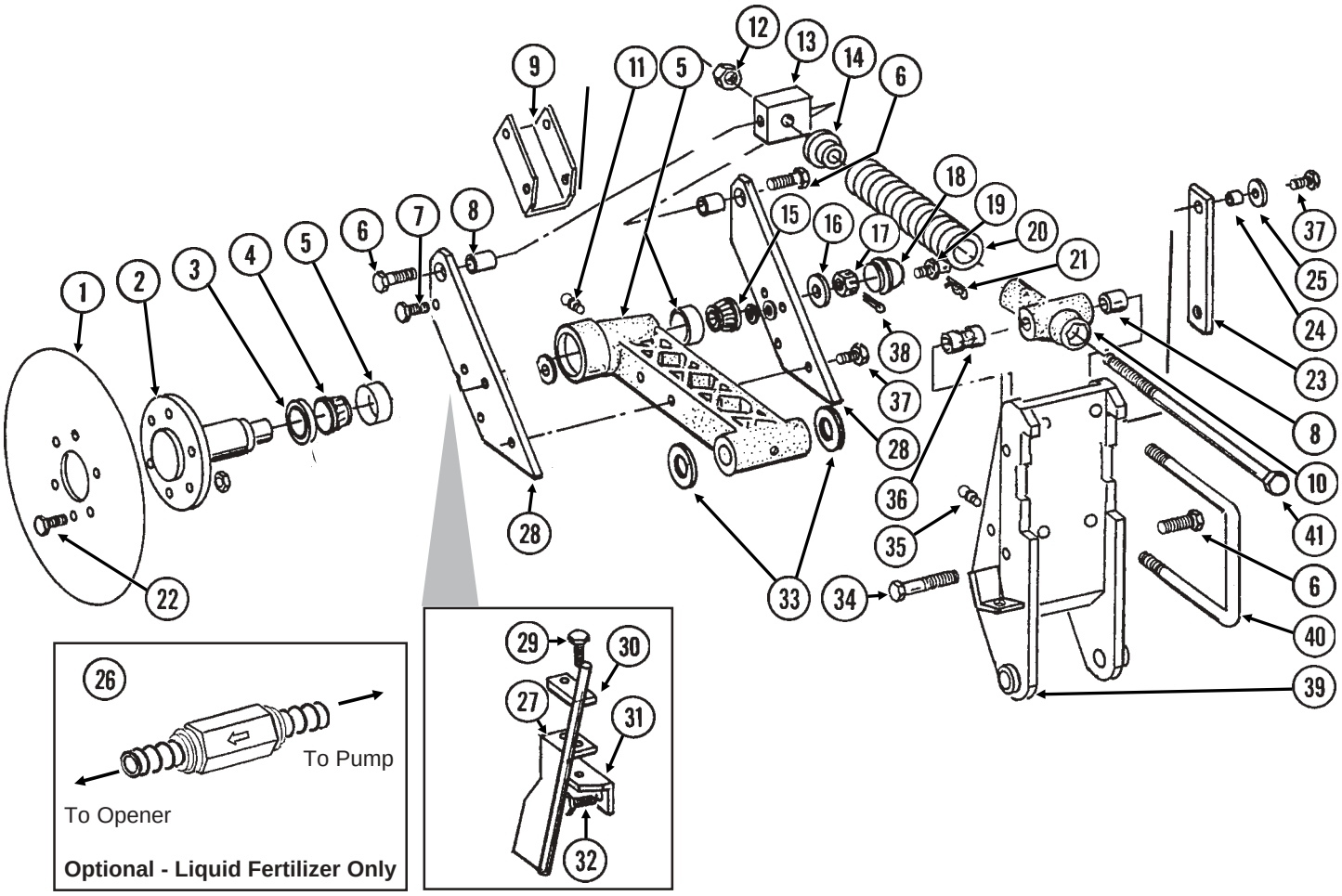


HD SINGLE DISC FERTILIZER OPENER (Soil Press Wheel)

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GD9705	2	J-Bolt, 1/2"-13
	G10228	2	Lock Washer, 1/2"
	G10102	2	Hex Nut, 1/2"-13
2.		-	See “HD Single Disc Fertilizer Opener (Blade And Drop Tube)”, Pages P116 And P117
3.	GD9706	1	Lockup Bar
4.	G10010	1	Hex Head Cap Screw, 5/8"-11 x 3"
5.	G10018	11	Hex Head Cap Screw, 5/16"-18 x 5/8"
	G10109	11	Lock Nut, 5/16"-18
6.	GD4888	1	Half Wheel Cover, Metal
7.	GA6171	1	Bearing
8.	GD4850	1	Offset Tire
9.	GD11423	1	Half Wheel
10.	G10438	1	Hex Head Cap Screw, 1/2"-13 x 3/4"
	G10228	1	Lock Washer, 1/2"
	G10216	1	Washer, 1/2" USS
11.	G10230	1	Lock Washer, 5/8"
12.	G10526	10	Machine Bushing, 1" (.048" Thick)
13.	G10560	1	Clevis Pin, 1/2" x 1 3/4"
	G10456	1	Cotter Pin, 1/8" x 3/4"
14.	GD8218	1	Yoke
15.	G10205	1	Washer, 5/8" SAE
16.		-	See “HD Single Disc Fertilizer Opener (Blade And Drop Tube)”, Pages P116 And P117
17.	GD7911	1	Pivot Pin
18.	G10610	1	Spring Pin, 3/8" 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, 1/4"-28
20.	GD8308	1	Spring
21.	GB0212	2	Washer
22.	GD9709	1	Special Bolt
23.	GA6345	-	Mounting Angle, L.H. (As Required) (Shown)
	GA6344	-	Mounting Angle, R.H. (As Required)
24.	G10005	-	Hex Head Cap Screw, 5/8"-11 x 1 3/4"
	G10230	-	Lock Washer, 5/8"
	G10104	-	Hex Nut, 5/8"-11
25.	GD11953	1	Offset Tire
26.	GD11954	1	Half Wheel Cover, Nylon
27.	G10961	11	Flanged Whiz-Lock Screw, 5/16"-18 x 3/4", No Serration
	G10620	11	Flange Nut, 5/16"-18
A.	G1K215	-	Lockup Kit (Items 1 And 3)
B.	GA8877	-	Wheel Assembly (Items 7, 9 And 25-27)

HD SINGLE DISC FERTILIZER OPENER (Blade And Drop Tube)

FOC016/FOC007/FOC019(PT27c/FRTZ208)



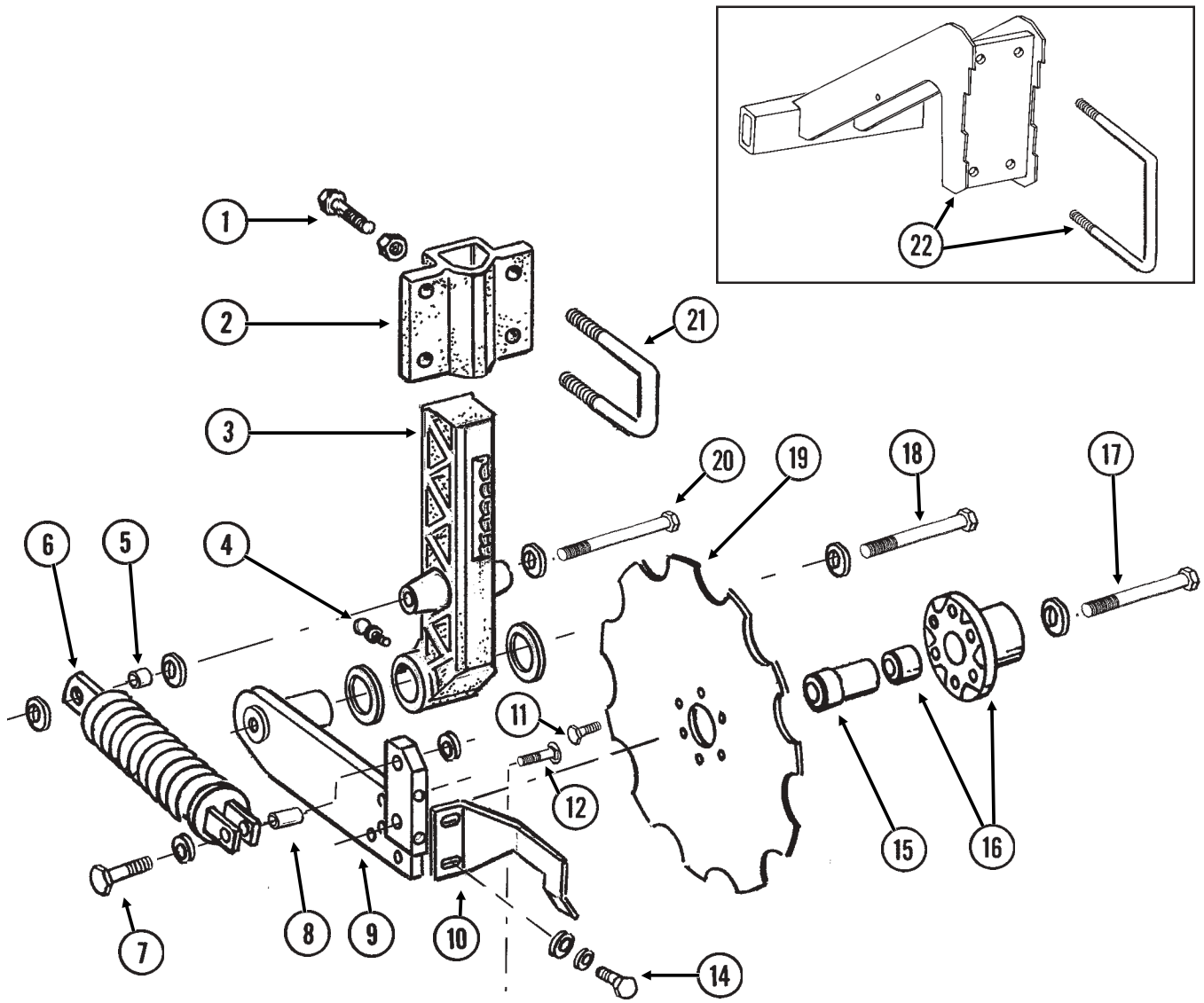
ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	GD7900	1	Disc Blade, 18"
2.	GB0205	1	Spindle
3.	GA4286	1	Seal
4.	GA4287	1	Bearing
5.	GA5887	1	Arm W/Cups And Washers
	GD6553	-	Cup
	GR0188	-	Cup
	G10205	3	Washer, 5/8" SAE
6.	G10007	3	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
7.	G10001	2	Hex Head Cap Screw, 3/8"-16 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.	GB0206	1	Rod Guide
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

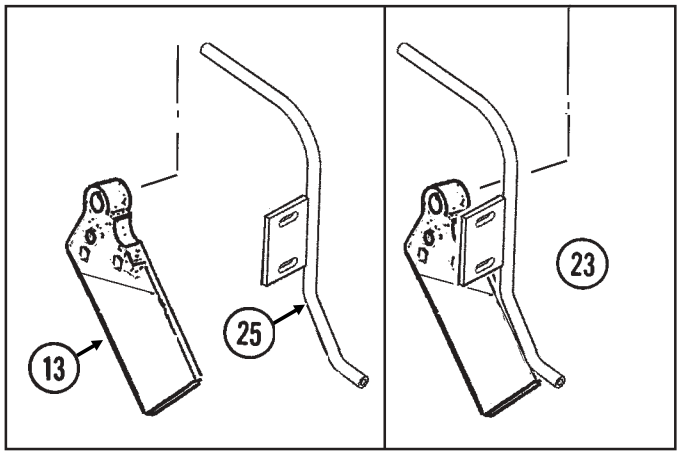
HD SINGLE DISC FERTILIZER OPENER (Blade And Drop Tube)

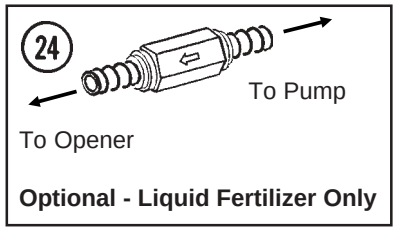
ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
19.	GD8276	1	Pin
	G10237	1	Lock Washer, 7/16"
	G10100	1	Hex Nut, 7/16"-14
20.	GD10273	1	Compression Spring
21.	G10592	1	Hair Pin Clip, No. 11
22.	G10594	6	Bolt, 1/2"-13 x 1 1/2"
	G10111	6	Lock Nut, 1/2"-13
23.	GD8239	1	Storage Strap
24.	GD7904-02	1	Sleeve, 1/2" x 1/2" Long
25.	G10216	3	Washer, 1/2" USS
26.	GA8983	-	Check Valve, Low Rate
27.	GA8689	1	Drop Tube, L.H., Liquid Fertilizer (Shown)
	GA8688	-	Drop Tube, R.H., Liquid Fertilizer
28.	GD8224	2	Bar
29.	G10004	2	Hex Head Cap Screw, 3/8"-16 x 1 1/4"
	G10229	2	Lock Washer, 3/8"
30.	GD10487	1	Clamp
31.	GD10304	-	Angle, R.H.
	GD10303	1	Angle, L.H. (Shown)
32.	G10016	2	Hex Head Cap Screw, 1/2"-13 x 2"
	G10111	2	Lock Nut, 1/2"-13
33.	G10322	-	Machine Bushing, 1 1/4", 18 Gauge (As Required)
34.	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"
35.	G10640	1	Grease Fitting, 1/4"-28
36.	GD10242	1	Bushing, 2 1/4"
37.	G10039	5	Hex Head Cap Screw, 1/2"-13 x 1 3/4"
	G10111	5	Lock Nut, 1/2"-13
38.	G10459	1	Cotter Pin, 3/16" x 1 1/2"
39.	GA7240	-	Opener Mount, R.H.
	GA7239	1	Opener Mount, L.H. (Shown)
40.	GD1113	2	U-Bolt, 5" x 7" x 5/8"-11
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
41.	GD7907	1	Special Bolt

NOTCHED SINGLE DISC FERTILIZER OPENER

FOC018(TWL34h/FRTZ209j/FRTZ208)







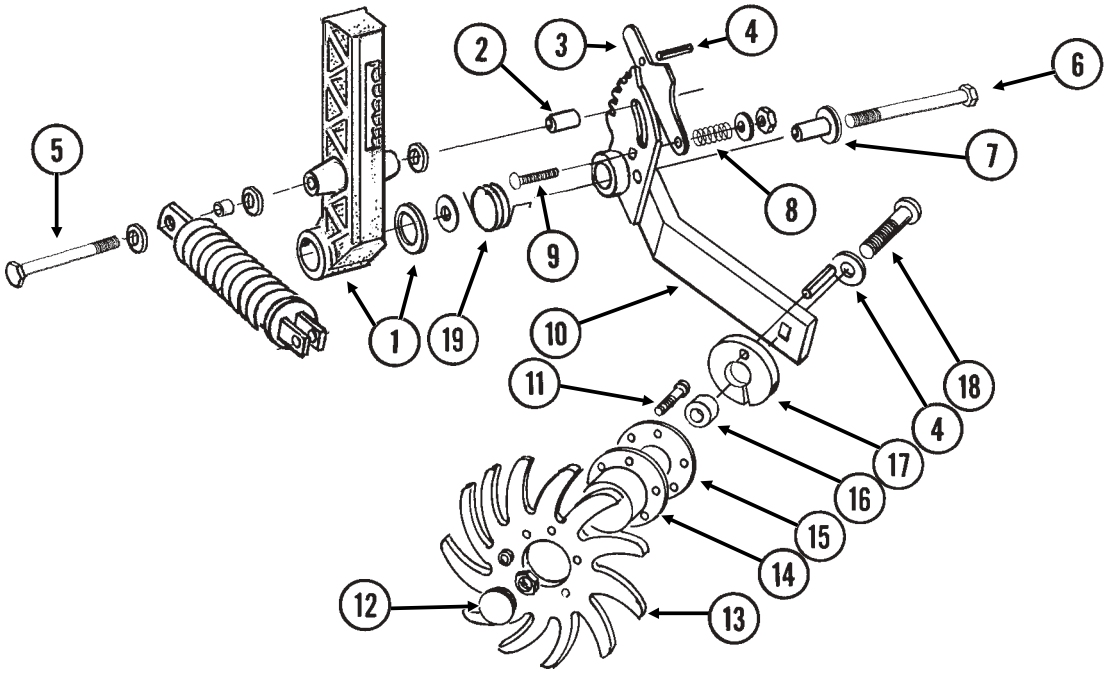
Optional - Liquid Fertilizer Only

NOTCHED SINGLE DISC FERTILIZER OPENER

ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.	G10017	3	Hex Head Cap Screw, 1/2"-13 x 1 1/2"
	G10102	3	Hex Nut, 1/2"-13
2.	GB0297	1	Mount
3.	GB0296	1	Arm, 13 1/2"
4.	G10640	1	Grease Fitting, 1/4"-28
5.	GD12685	1	Bushing, 3/4" O.D. x 1/2" Long
6.	GA6966	1	Compression Spring Assembly
7.	G10047	1	Hex Head Cap Screw, 3/8"-16 x 1 3/4"
	G10210	2	Washer, 3/8" USS
	G10108	1	Lock Nut, 3/8"-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, 3/8"-16 x 3/4"
12.	G10306	3	Carriage Bolt, 3/8"-16 x 2"
	G10108	3	Lock Nut, 3/8"-16
13.	GB0249	1	Knife, L.H. (Shown)
	GB0248	-	Knife, R.H.
14.	G10991	2	Hex Head Cap Screw, 5/16"-18 x 7/8"
	G10232	2	Lock Washer, 5/16"
	G10219	6	Washer, 5/16" USS
15.	GD12679	1	Stepped Spacer, 3" Long
16.	GA9437	1	Hub W/Bearing
	GA8603	-	Double Row Bearing
17.	G10011	1	Hex Head Cap Screw, 5/8"-11 x 5 1/2"
	GD12677	1	Washer, 1 1/2" O.D., 7 Gauge, Hardened
	G10107	1	Lock Nut, 5/8"-11
18.	G10046	1	Hex Head Cap Screw, 5/8"-11 x 5"
	G10217	1	Washer, 5/8" USS
	G10450	2	Machine Bushing, 1 1/2", 18 Gauge (As Required)
	G10107	1	Lock Nut, 5/8"-11
19.	GD12676	1	Disc Blade, Notched, 16 3/4"
20.	G10871	1	Hex Head Cap Screw, 1/2"-13 x 6"
	G10206	3	Washer, 1/2" SAE
	G10111	1	Lock Nut, 1/2"-13
21.	GD13287	2	U-Bolt, 1 1/2" x 2 1/2" x 1/2"-13
	G10228	4	Lock Washer, 1/2"
	G10102	4	Hex Nut, 1/2"-13
22.	GA9565	1	Mount W/U-Bolts
	GD1113	2	U-Bolt, 5" x 7" x 5/8"-11
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
23.	GA9461	1	Knife/Drop Tube, L.H., Liquid Fertilizer (Shown) **(Sub GA8399 And GB0249)**
	GA9462	1	Knife/Drop Tube, R.H., Liquid Fertilizer **(Sub GA8398 And GB0248)**
24.	GA8983	-	Check Valve, Low Rate
25.	GA8399	-	Drop Tube, L.H., Liquid Fertilizer (Shown)
	GA8398	1	Drop Tube, R.H., Liquid Fertilizer

RESIDUE WHEEL ATTACHMENT FOR NOTCHED SINGLE DISC FERTILIZER OPENER

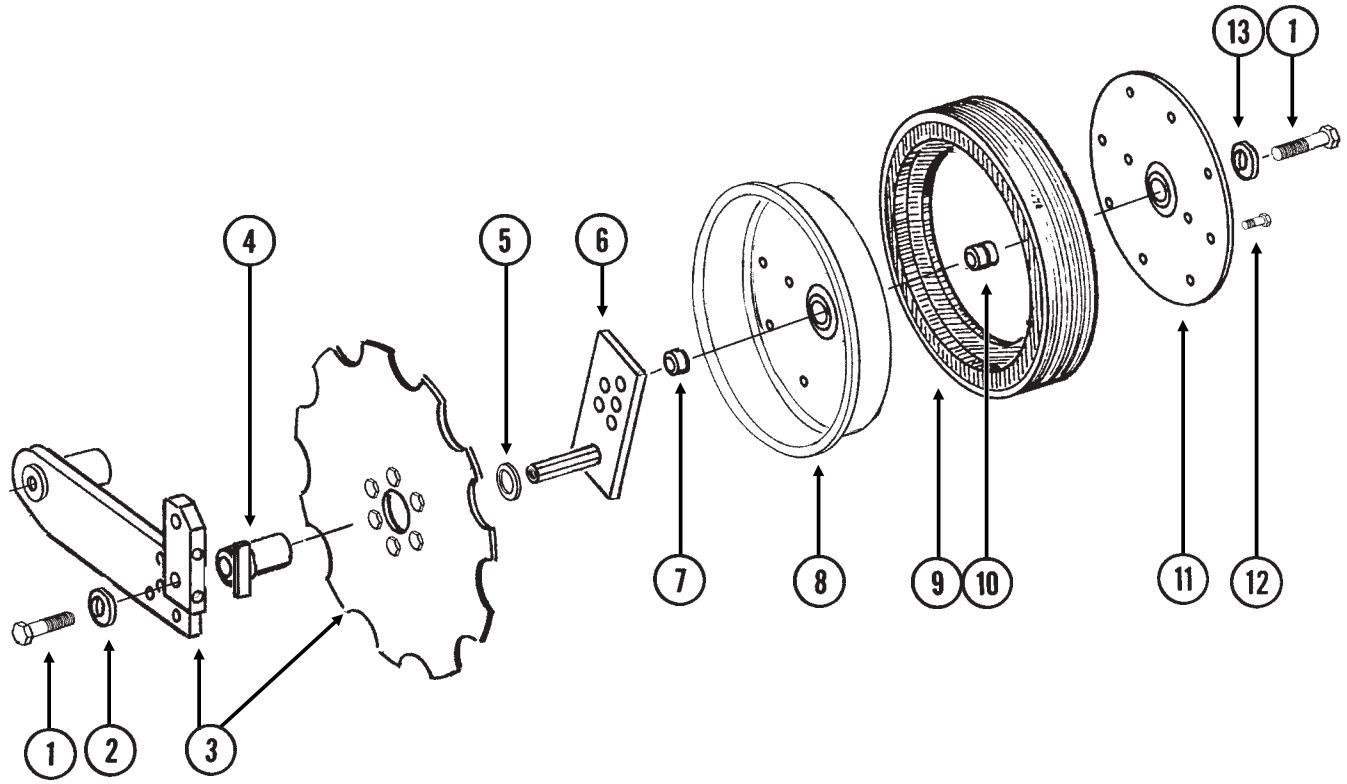
DFC024(FRTZ165I)



ITEM	PART NO.	QTY. (Per Assy.)	DESCRIPTION
1.		-	See “Notched Single Disc Fertilizer Opener ”, Pages P118 And P119
2.	GD12684	1	Bushing, 1 1/3" Long
3.	GD11178	1	Adjustment Lever
4.	G10603	2	Spring Pin, 1/4" x 1 1/4"
5.	G11034	1	Hex Head Cap Screw, 1/2"-13 x 7"
	G10111	1	Lock Nut, 1/2"-13
6.	G10830	1	Hex Head Cap Screw, 5/8"-11 x 7 1/2"
	GD7805	1	Special Washer, 5/8", Hardened
	G10107	1	Lock Nut, 5/8"-11
7.	GD11836	1	Sleeve, 2 1/8" Long
8.	GD7962	1	Spring
9.	G10306	1	Carriage Bolt, 3/8"-16 x 2"
	G10203	1	Washer, 3/8" SAE
	G10108	1	Lock Nut, 3/8"-16
10.	GA7999	1	Mount W/Grease Fitting, L.H. (Shown)
	GA7998	-	Mount W/Grease Fitting, R.H.
	G10640	-	Grease Fitting, 1/4"-28
11.	G10133	6	Hex Head Cap Screw, 5/16"-18 x 1 1/2"
	G10109	6	Lock Nut, 5/16"-18
12.	GD1132	2	Dust Cap
13.	GD10552	2	Wheel, 12 Tine, 3/8" 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 1/2" Long
17.	GD11188	1	Spacer
18.	G10908	1	Carriage Bolt, 5/8"-11 x 3"
	G10503	1	Hex Jam Nut, 5/8"-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

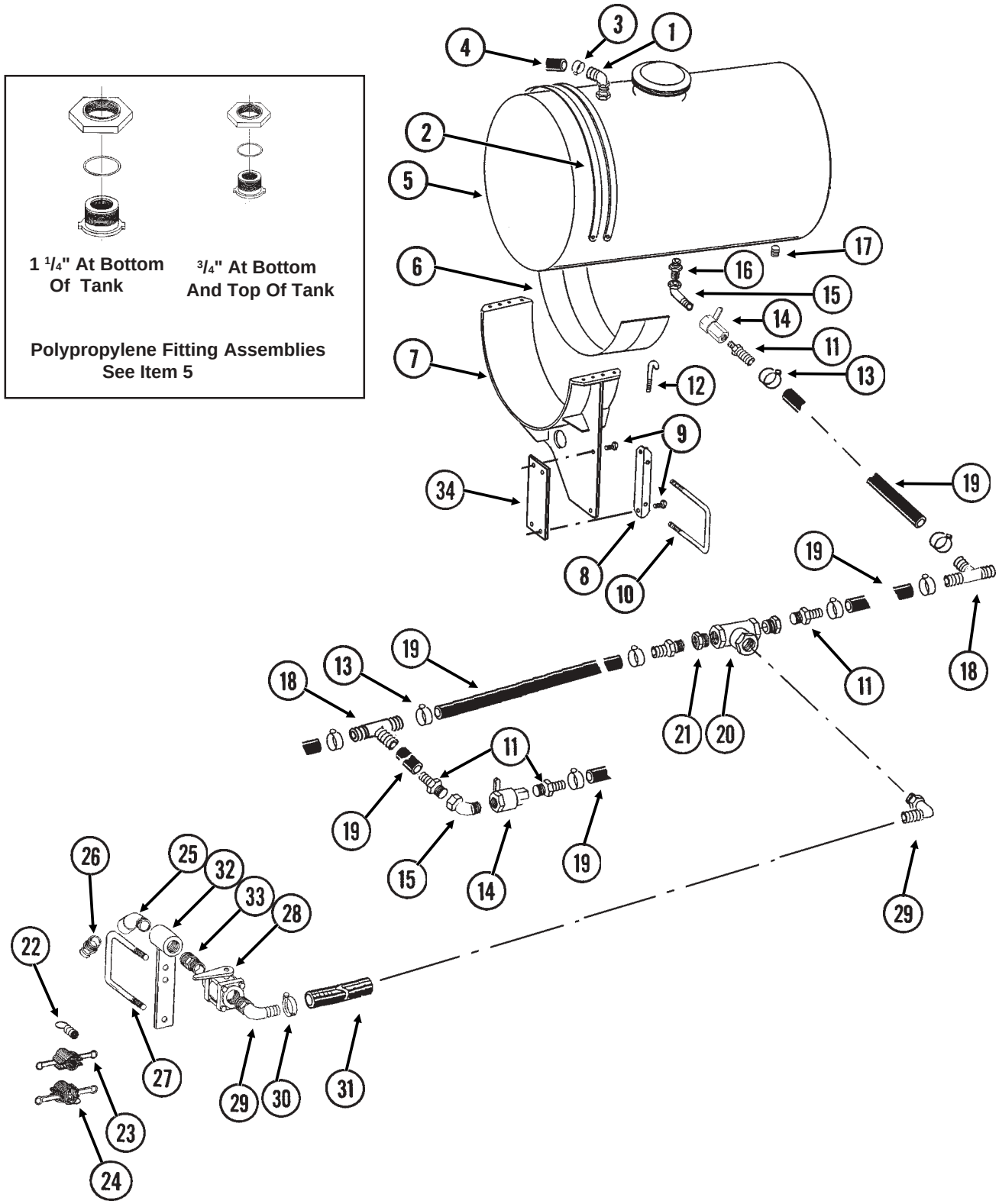
(FRTZ209d)



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 P118 And P119
4.	GA9472	1	Blade Mount
5.	G10233	1	Machine Bushing, 1", 10 Gauge
6.	GA9473	1	Wheel Mount
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	Flange Nut, 5/16"-18
13.	G10204	1	Special Machine Bushing, 5/8" x 1" O.D.
A.	GA8877	-	Wheel Assembly (Items 8-12)

LIQUID FERTILIZER TANKS, SADDLES, SADDLE MOUNTS AND HOSES

LFC021/LFC023/LFC030/LFC012(FRTZ201a)

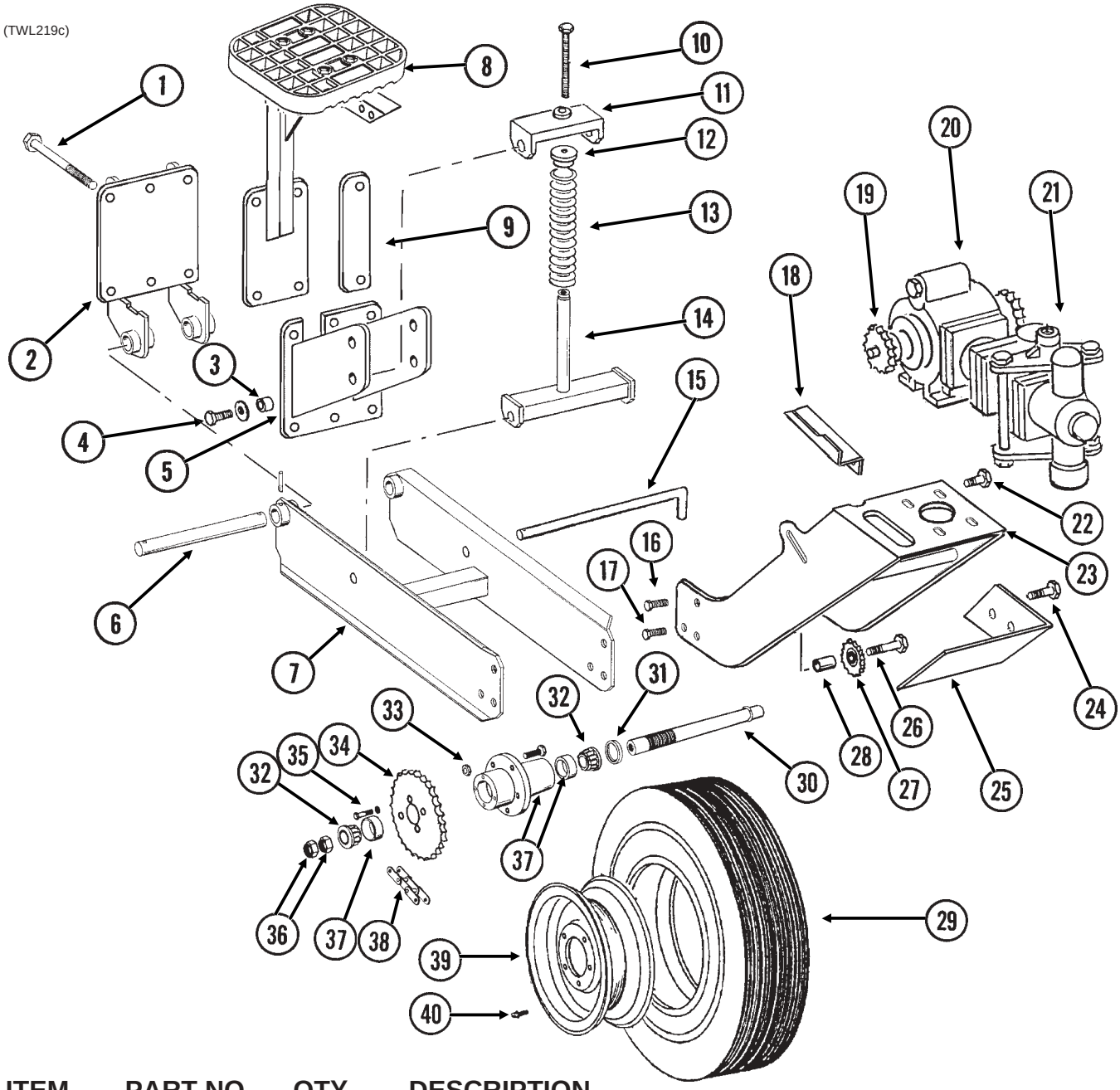


LIQUID FERTILIZER TANKS, SADDLES, SADDLE MOUNTS AND HOSES

ITEM	PART NO.	QTY.	DESCRIPTION
1.	G10917	4	Elbow, 90°, 3/4" NPT To Barb
2.	GD1520	16	Band, 30" (4 Per Tank)
3.	G10278	4	Hose Clamp, No. 16
4.	G4205-11	-	Hose, 3/4" x 72" (One Per Tank)
5.	GD1812	4	Tank W/Lid And Fittings, 30" x 150 Gallon
	GR1005	-	Fillwell, 10", Threaded (Top Of Tank)
	GR1006	-	Lid, 10", Threaded (Top Of Tank)
	GR0513	-	3/4" Polypropylene Fitting Assembly (Nut, Bushing And O-Ring)
	GR0508		1 1/4" Polypropylene Fitting Assembly (Nut, Bushing And O-Ring)
6.	GD1862	2	Pad, 8" x 14'
7.	GA9671	8	Tank Mount (2 Per Tank)
8.	GD10110	8	Mounting Angle (2 Per Tank)
9.	G10007	24	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
	G10230	24	Lock Washer, 5/8"
	G10104	24	Hex Nut, 5/8"-11
10.	GD1747	8	U-Bolt, 5" x 7" x 3/4"-10
	G10231	16	Lock Washer, 3/4"
	G10105	16	Hex Nut, 3/4"-10
11.	G10626	10	Adapter, 1 1/4" NPT To Barb
12.	GD1337	32	J-Bolt, 5/16"-18 (8 Per Tank)
	G10109	32	Lock Nut, 5/16"-18 (8 Per Tank)
13.	G10674	24	Hose Clamp, No. 24
14.	GA4976	5	Shutoff Valve, 1 1/4" NPT
	GR1015	-	Body O-Ring
	GR1016	-	Stem O-Ring
	GR1017	-	Teflon Seat
	GR1018	-	Ball
	GR1019	-	Handle
15.	G10887	5	Elbow, 90°, 1 1/4" Male NPT To Female
16.	G10619	4	Close Nipple, 1 1/4" NPT
17.	G10096	4	Pipe Plug, 3/4" NPT
18.	G10633	3	Tee, 1 1/4" Barb
19.	G4200-03	1	Hose, 1 1/4" x 32', 12 Row 30"
	G4200-06	-	Hose, 1 1/4" x 40', 16 Row 30"
20.	G10888	1	Tee, 2" Female NPT
21.	G10616	2	Reducing Bushing, 2" Male NPT To 1 1/4" Female
22.	GD10777	1	Dust Plug, 2" Male Cam Lock
23.	GD3622	1	Adapter, 2" Female NPT To Cam Lock
24.	GD3951	1	Dust Cap, 2" Cam Lock
25.	G10889	1	Elbow, 45°, 2" Male NPT To Female
26.	GD3623	1	Adapter, 2" Male NPT To Cam Lock
27.	GD1113	1	U-Bolt, 5" x 7" x 5/8"-11
	G10230	2	Lock Washer, 5/8"
	G10104	2	Hex Nut, 5/8"-11
28.	GA2660	1	Shutoff Valve, 2" NPT
29.	G10630	2	Elbow, 90°, 2" NPT To Barb
30.	G10676	2	Hose Clamp, No. 36
31.	G4201-03	1	Hose, 2" x 18'
32.	GA7845	1	Quick Fill Mount, 2"
33.	G10623	1	Close Nipple, 2" NPT
34.	GD13648	4	Plate, 4" x 10 1/2" (Outboard Tanks Only)

LIQUID FERTILIZER PISTON PUMP MOUNT/DRIVE

(TWL219c)



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.	GA9711	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.	GA9712	1	Spring Mount
6.	GD2681	1	Pin, 1 1/4" x 13 1/2"
	G10460	2	Cotter Pin, 1/4" x 2"
7.	GA6307	1	Arm W/Grease Fittings
	G10641	2	Grease Fitting, 1/8" NPT
8.		-	See “Bulk Seed Hopper Catwalk”, Page P11
9.	GD13766	1	Spacer Plate

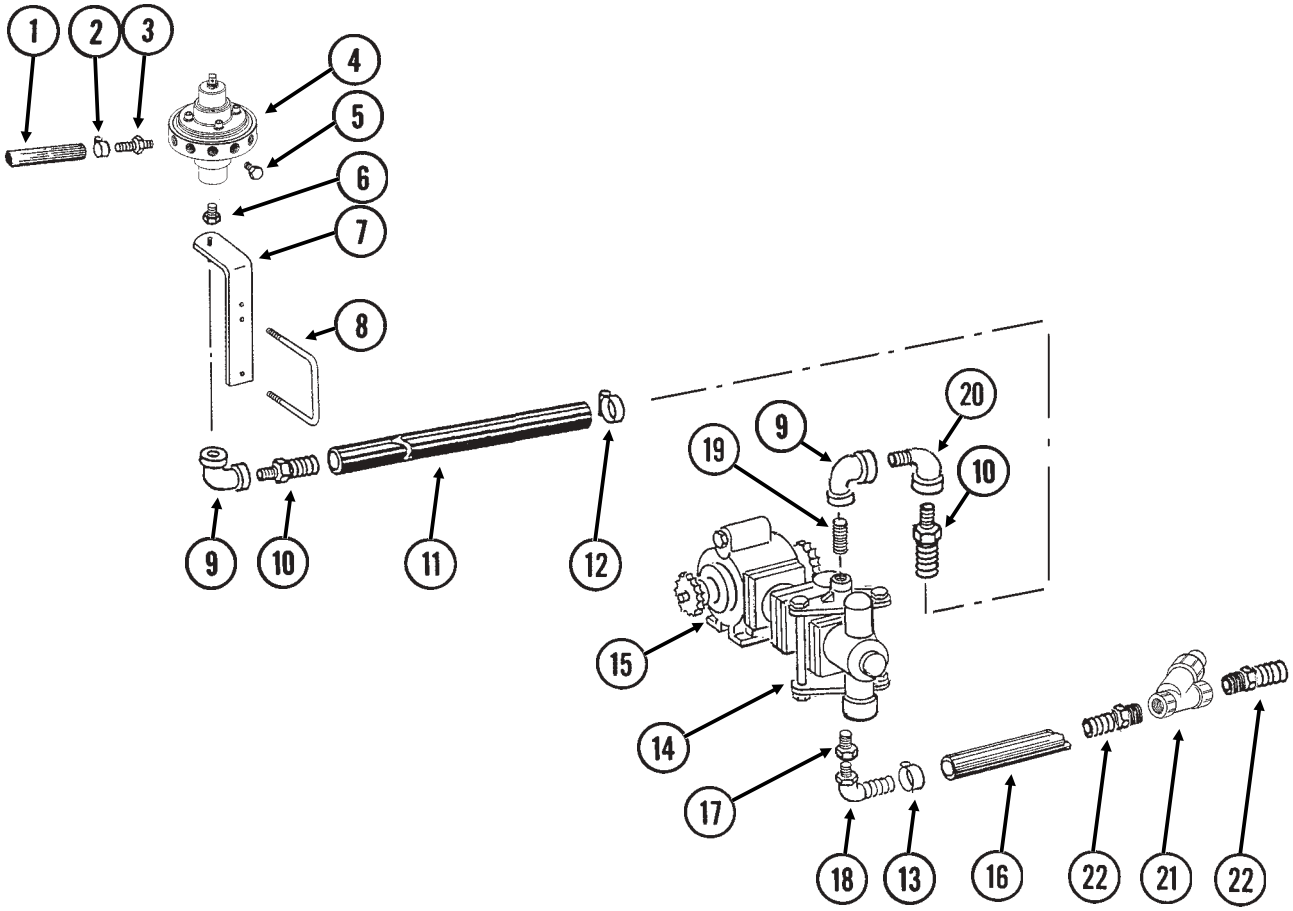
LIQUID FERTILIZER PISTON PUMP MOUNT/DRIVE

ITEM	PART NO.	QTY.	DESCRIPTION
10.	G10012	1	Hex Head Cap Screw, 5/8"-11 x 6 1/2"
	GD7805	1	Special Washer, 5/8", Hardened
11.	GA6308	1	Spring Mount
12.	GB0196	1	Washer
13.	GD7831	1	Compression Spring
14.	GA6309	1	Spring Guide
15.	GD8917	1	L-Pin, 12 3/8"
	GD2558	1	Lynch Pin, 1/4"
16.	G10026	2	Hex Head Cap Screw, 3/4"-10 x 2"
	G10231	2	Lock Washer, 3/4"
17.	G11042	2	Hex Head Cap Screw, 3/4"-10 x 1 3/4"
	G10231	2	Lock Washer, 3/4"
	G10105	2	Hex Nut, 3/4"-10
18.	GD13744	1	Hose Holder
19.	GR1146	1	Sprocket, 18 Tooth
20.		-	See “Liquid Fertilizer Piston Pump (Crankcase Assembly)”, Pages P129 And P130
	GR0200	1	Offset Link, No. 2050
21.		-	See “Liquid Fertilizer Piston Pump (Cylinder Assembly)”, Pages P129 And P130
22.	G10007	2	Hex Head Cap Screw, 5/8"-11 x 1 1/2"
	G10217	2	Washer, 5/8" USS
	G10230	2	Lock Washer, 5/8"
	G10104	2	Hex Nut, 5/8"-11
23.	GA9709	1	Pump Mount
24.	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"-13
25.	GD13328	1	Scraper
26.	G10013	1	Hex Head Cap Screw, 5/8"-11 x 3 1/2"
	G10205	1	Washer, 5/8" SAE
	G10230	1	Lock Washer, 5/8"
	G10104	1	Hex Nut, 5/8"-11
27.	GA0262	1	Idler Sprocket W/Bearing, 15 Tooth
28.	GD7817-05	1	Spacer, 11/16" I.D. x 1 1/4" 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, 1/2"-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 1/4"-12 UNF-2A
37.	GA0547	1	Hub W/Cups And Studs, 5 Bolt
	GR0190	2	Cup
	GR0204	5	Stud
38.	G3200-59	1	Chain, No. 2050, 59 Pitch Including Connector Link And Offset Link
	GR0195	1	Connector Link, No. 2050
39.	GA0241	1	Wheel, 5" x 15"
40.	GD1166	1	Valve Stem

*** Specific brand requests will be supplied only as available from current KINZE® 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 could result in rate changes.**

LIQUID FERTILIZER FLOW DIVIDER MOUNT AND HOSES

(FRTZ215a)

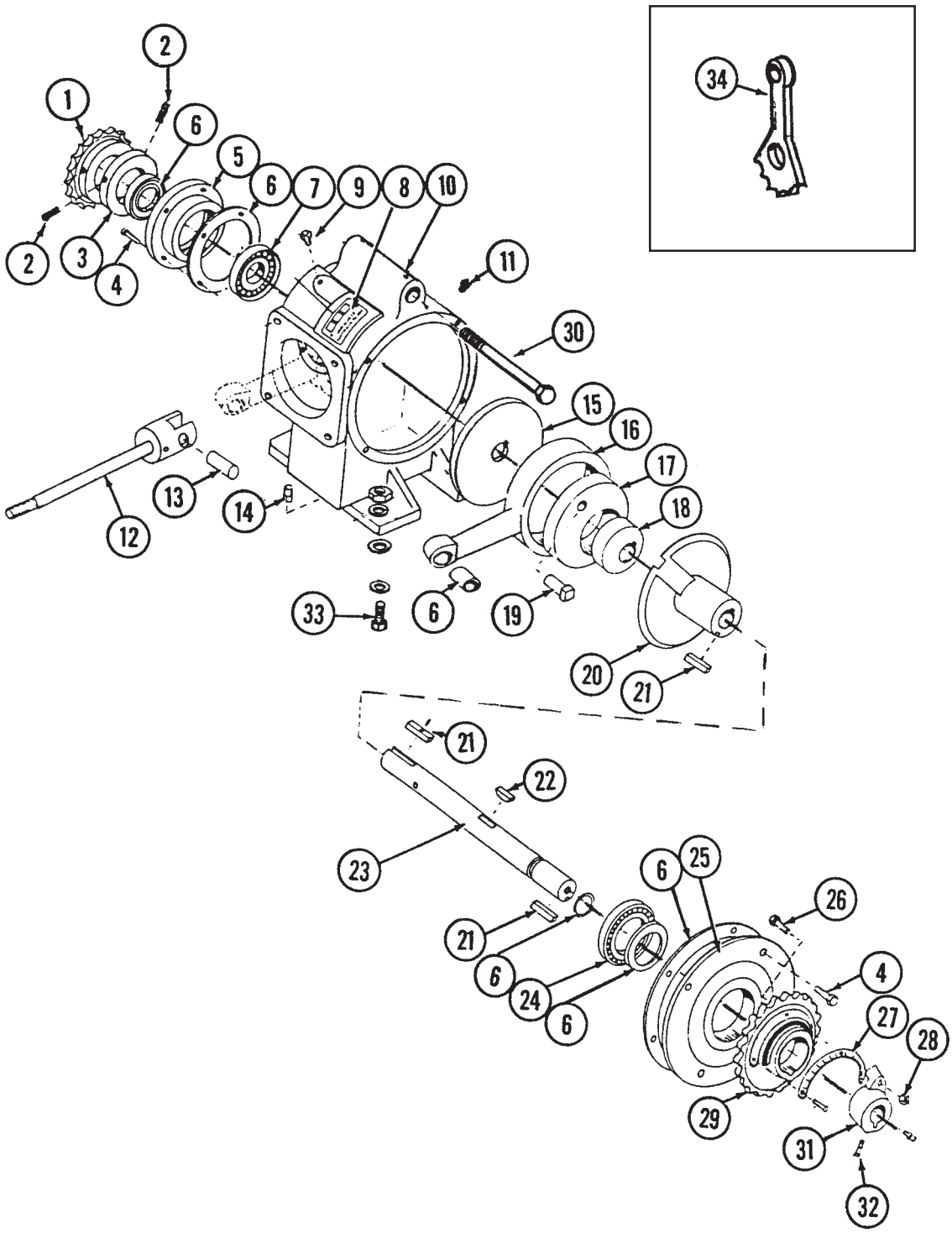


LIQUID FERTILIZER FLOW DIVIDER MOUNT AND HOSES

ITEM	PART NO.	QTY.	DESCRIPTION
1.	G4301-06	1	Hose, 3/8" x 160', 12 Row 30"
	G4301-05	2	Hose, 3/8" x 120', 16 Row 30"
2.	G10681	24-32	Hose Clamp, No. 6
3.	GD11700	12-16	Adapter, 1/4" NPT To 3/8" Barb
4.		-	See “Liquid Fertilizer Piston Pump Flow Divider”, Pages P132 And P133
5.	G10292	-	Pipe Plug, 1/4" NPT
6.	G10995	1	Reducing Bushing, 1" Male NPT To 3/4" Female, Stainless Steel, 16 Row 30"
7.	GA6527	1	Support, 3/4" NPT
8.	GD1113	1	U-Bolt, 5" x 7" x 5/8"-11
	G10230	2	Lock Washer, 5/8"
	G10104	2	Hex Nut, 5/8"-11
9.	G10733	2	Elbow, 90°, 3/4" Female NPT
10.	G10734	2	Adapter, 3/4" NPT To Barb
11.	G4205-08	-	Hose, 3/4" x 150"
12.	G10278	2	Hose Clamp, No. 16
13.	G10674	2	Hose Clamp, No. 24
14.		-	See “Liquid Fertilizer Piston Pump (Cylinder Assembly)”, Pages P130 And P131
15.		-	See “Liquid Fertilizer Piston Pump (Crankcase Assembly)”, Pages P128 And P129
16.		-	Hose, 1 1/4", See “Liquid Fertilizer Tanks, Saddles, Saddle Mounts And Hoses”, Pages P122 And P123
17.	G10615	1	Reducing Bushing, 1 1/2" Male NPT To 1 1/4" Female
18.	G10629	1	Elbow, 90°, 1 1/4" NPT To Barb
19.	G10389	1	Pipe Nipple, 3/4" NPT x 1 1/2" Long
20.	G10735	1	Elbow, 90°, 3/4" Male NPT To Female
21.	GA3893	1	Strainer Complete
	GR0880	-	Screen, No. 40 Mesh
	GR0881	-	Gasket
	GR0882	-	Y-Body
	GR0883	-	End Cap
22.	G10626	2	Adapter, 1 1/4" NPT To Barb

LIQUID FERTILIZER PISTON PUMP (Crankcase Assembly)

John Blue® Model L-4405

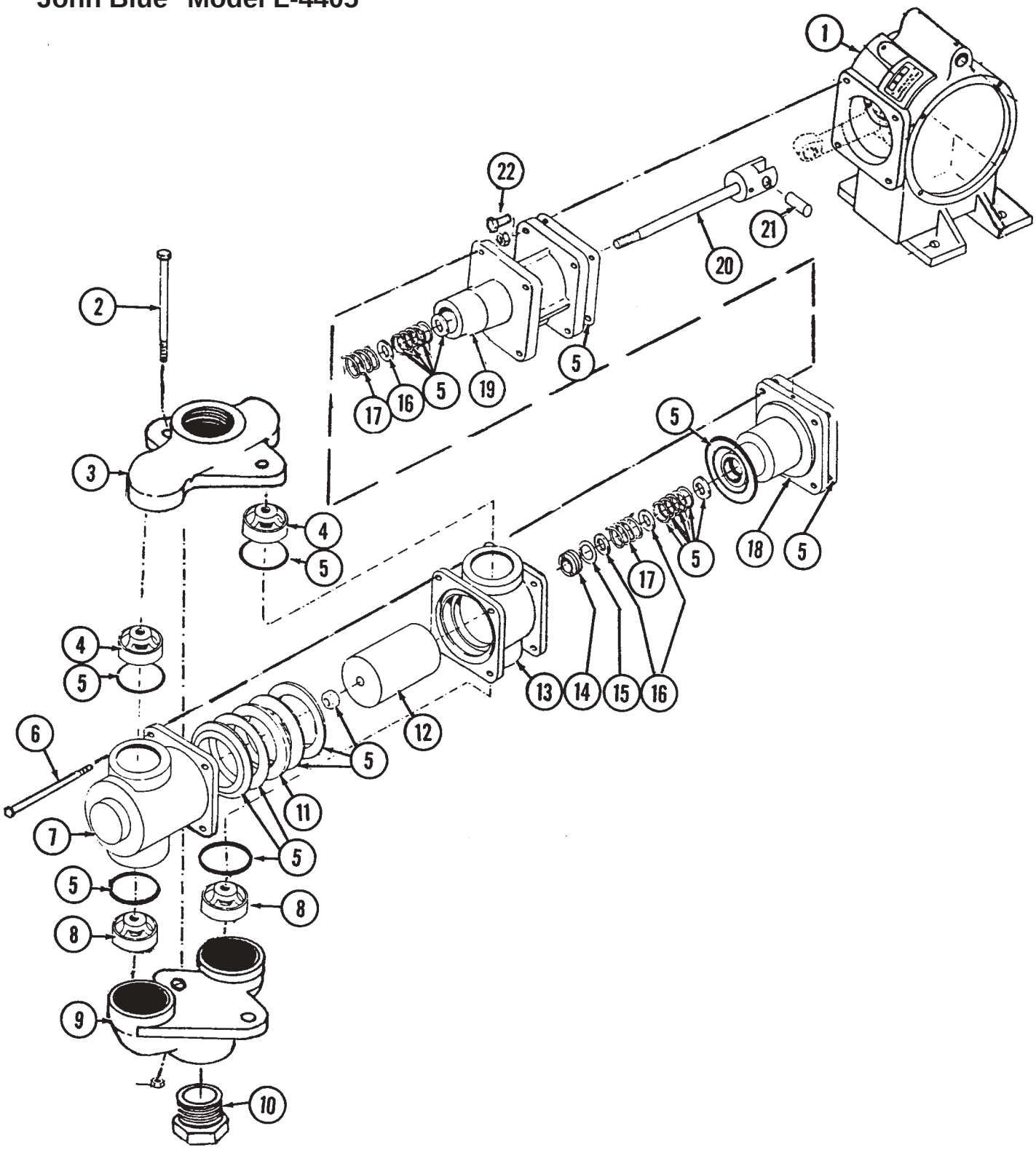


LIQUID FERTILIZER PISTON PUMP (Crankcase Assembly)

ITEM	PART NO.	QTY.	DESCRIPTION
1.		-	See “Liquid Fertilizer Piston Pump Mount/Drive”, Pages P124 And P125
2.	G10688	2	Square Head Set Screw, 3/8"-16 x 5/8"
3.	GR1147	1	Spacer
4.	G10019	4	Hex Head Cap Screw, 5/16"-18 x 1"
5.	GR1102	1	Housing
6.	GR1173	-	Repair Kit, Includes Item 5 On “Liquid Fertilizer Piston Pump (Cylinder Assembly)”, Pages P130 And P131
7.	GR1104	1	Bearing
8.	GR1105	1	Name Plate
9.	G10054	2	Hex Head Cap Screw, 5/16"-18 x 1/2"
10.	GR1106	1	Crankcase
11.	GR1107	1	Vent Plug
12.		-	See “Liquid Fertilizer Piston Pump (Cylinder Assembly)”, Pages P130 And P131
13.		-	See “Liquid Fertilizer Piston Pump (Cylinder Assembly)”, Pages P130 And P131
14.	GR1123	3	Plug
15.	GR1108	1	Disc
16.	GR1109	1	Connecting Rod
17.	GR1110	1	Large Eccentric
18.	GR1111	1	Small Eccentric
19.	GR1120	1	Eccentric Pin
20.	GR1119	1	Sleeve
21.	GR1118	3	Setting Arm Key
22.	GR1112	1	Woodruff Key
23.	GR1148	1	Crankshaft
24.	GR1116	1	Bearing
25.	GR1166	1	Cover Plate
26.	GR1167	1	Square Head Bolt, 3/8"-16 x 1 3/4"
27.	GR1168	1	Scale
28.	G10108	1	Lock Nut, 3/8"-16
29.	GR1114	1	Flange
30.	G10318	1	Hex Head Cap Screw, 5/8"-11 x 4 1/2"
	G10104	1	Hex Nut, 5/8"-11
31.	GR1165	1	Arm
32.	G10693	4	Hex Socket Head Set Screw, 5/16"-18 x 3/8"
33.	G10003	4	Hex Head Cap Screw, 3/8"-16 x 1 1/2"
	GR1122	4	Mounting Pad
	G10210	8	Washer, 3/8" USS
	G10229	4	Lock Washer, 3/8"
	G10101	4	Hex Nut, 3/8"-16
34.	GR1100	1	Adjustment Wrench
A.	GA6154	1	Piston Pump Complete Less 23 Tooth Sprocket (L-4405), Includes Crankcase (Items 2-34 OnThis Page) And Cylinder (Items 1-22 On Pages P130 And P131) Assemblies

LIQUID FERTILIZER PISTON PUMP (Cylinder Assembly)

John Blue® Model L-4405



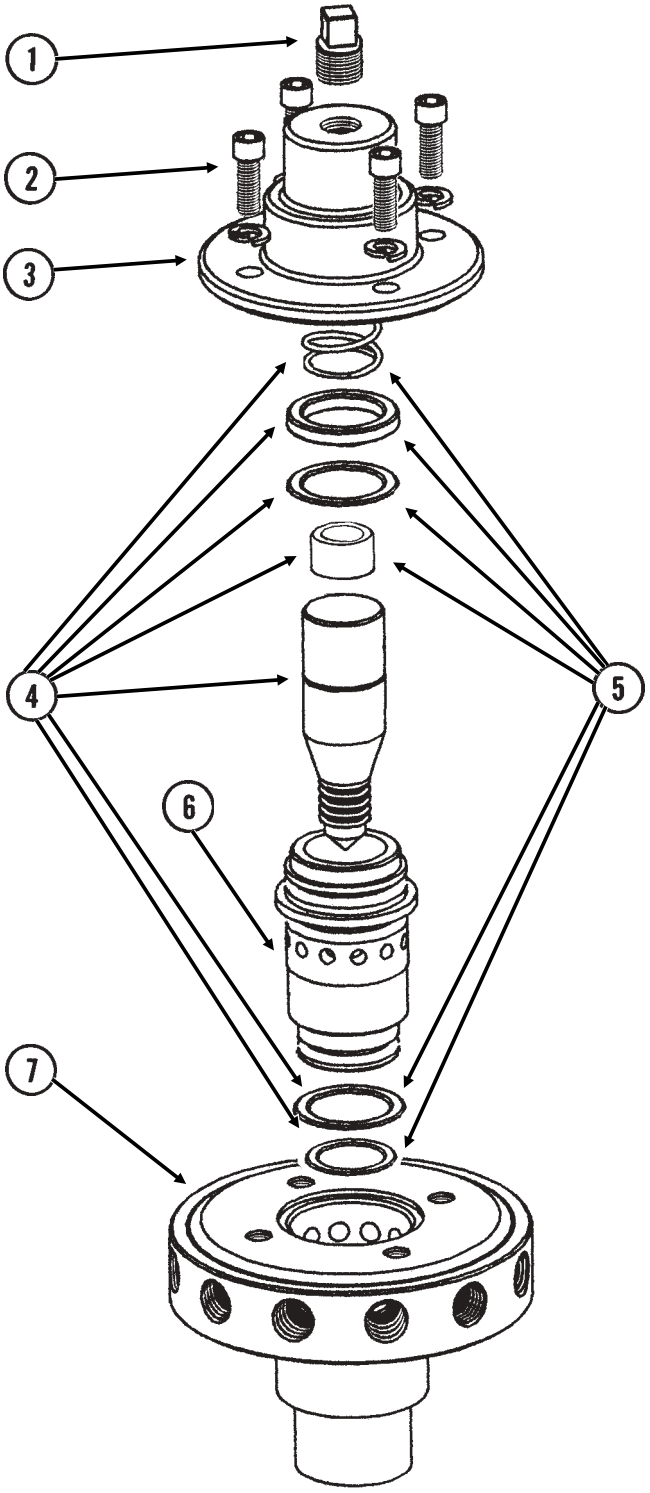
LIQUID FERTILIZER PISTON PUMP (Cylinder Assembly)

ITEM	PART NO.	QTY.	DESCRIPTION
1.		-	See “Liquid Fertilizer Piston Pump (Crankcase Assembly)”, Pages P128 And P129
2.	G10686	2	Hex Head Cap Screw, 3/8"-16 x 8"
	G10101	2	Hex Nut, 3/8"-16
3.	GR1145	1	Discharge Manifold
4.	GR1144	2	Discharge Valve
5.	GR1173	-	Repair Kit, Includes Item 6 On “Liquid Fertilizer Piston
		-	Pump (Crankcase Assembly)”, Pages P128 And P129
6.	G10687	4	Hex Head Cap Screw, 3/8"-16 x 5 1/2"
	G10101	4	Hex Nut, 3/8"-16
7.	GR1143	1	Outboard Cylinder
8.	GR1142	2	Suction Valve
9.	GR1140	1	Suction Manifold
10.		-	See “Liquid Fertilizer Piston Pump Mount/Drive”, Pages P124 And P125
11.	GR1137	1	Flange Packing Washer
12.	GR1136	1	Plunger
13.	GR1135	1	Inboard Cylinder
14.	GR1134	1	Stuffing Box Insert
15.	GR1133	1	Retaining Ring
16.	GR1129	3	Washer
17.	GR1130	2	Packing Spring
18.	GR1132	1	Outboard Stuffing Box
19.	GR1127	1	Crosshead Guide
20.	GR1125	1	Piston Rod
21.	GR1124	1	Pin
22.	G10019	4	Hex Head Cap Screw, 5/16"-18 x 1"

LIQUID FERTILIZER PISTON PUMP FLOW DIVIDER

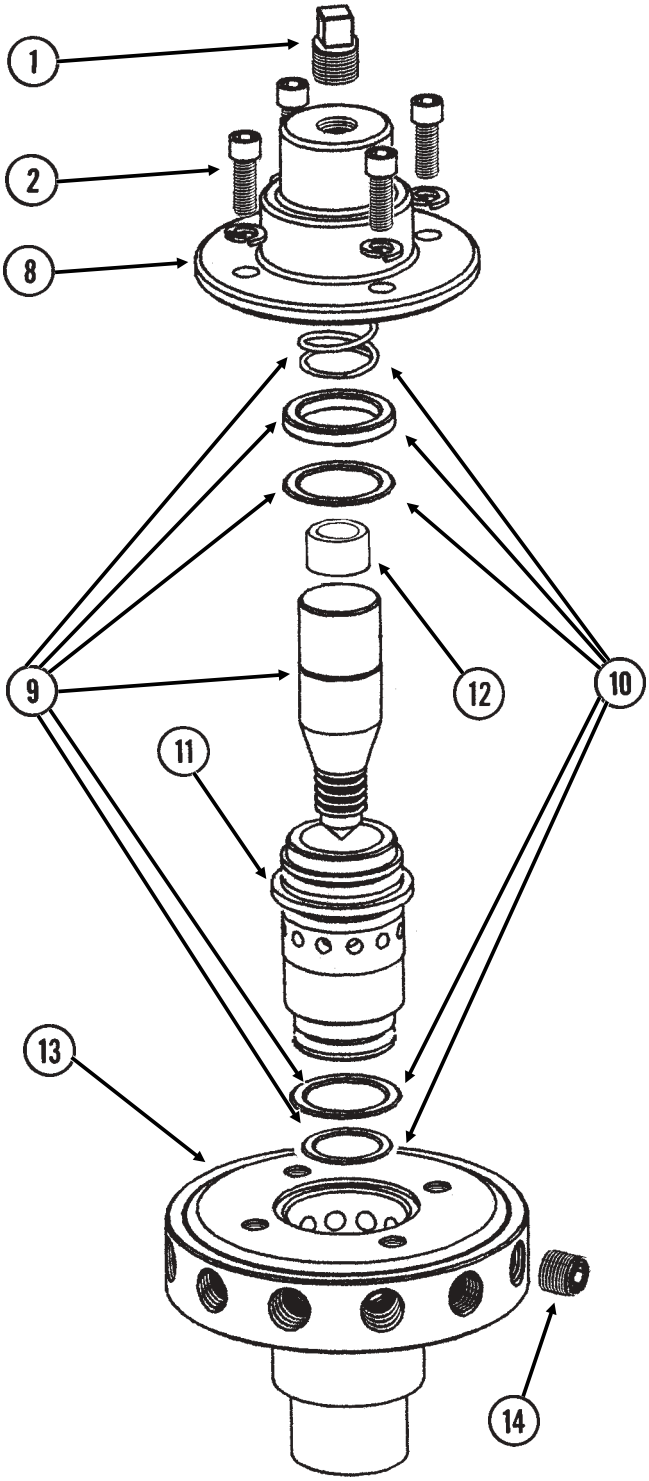
(FRTZ202a/FRTZ202c/FRTX202d)

12 Row 30"
Model FD-1200 Flow Divider



3/4" NPT

16 Row 30"
Model FD-2000 Flow Divider



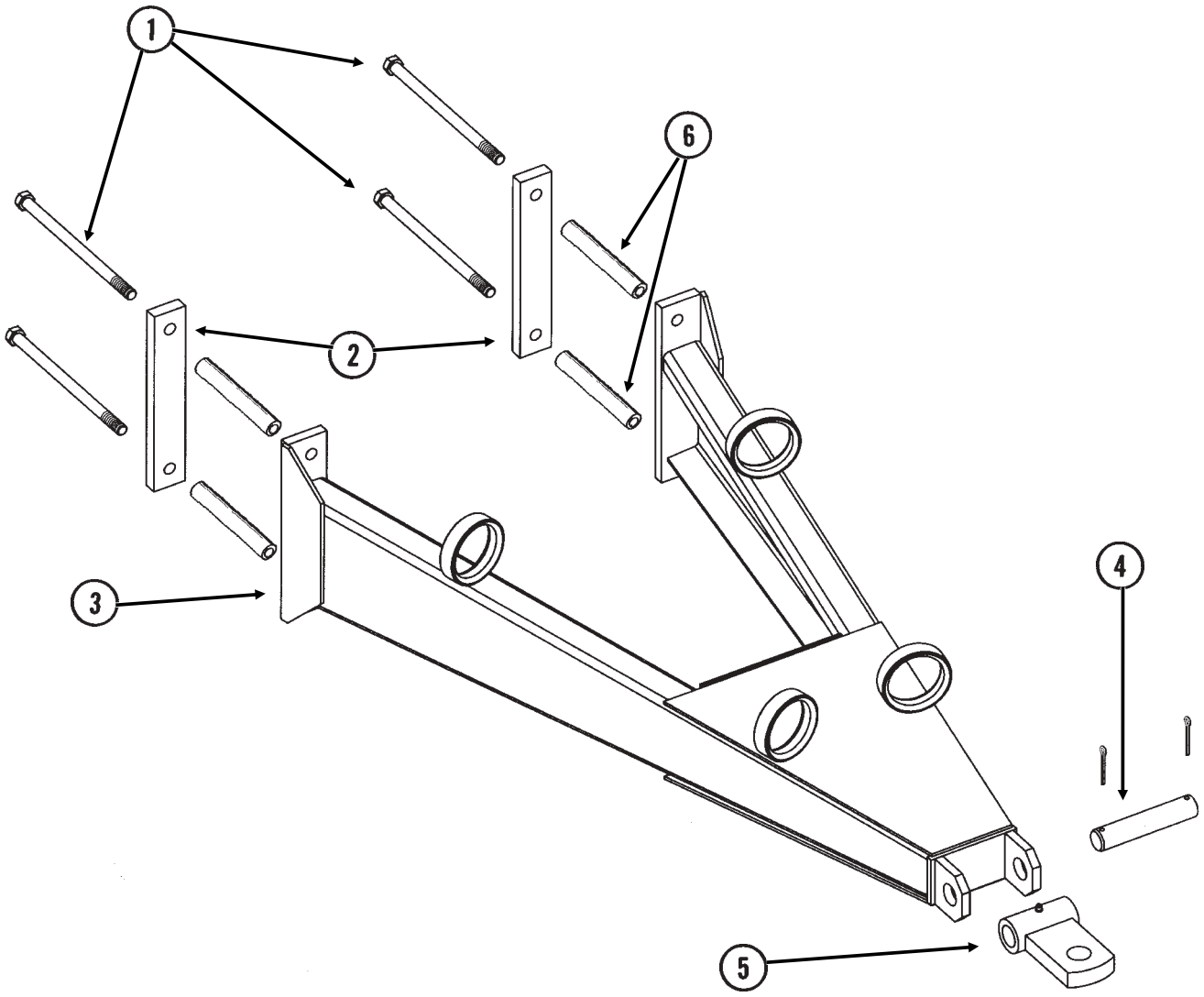
1" NPT

LIQUID FERTILIZER PISTON PUMP FLOW DIVIDER

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

REAR TRAILER HITCH

(A9895)



REAR TRAILER HITCH

ITEM	PART NO.	QTY.	DESCRIPTION
1.	G11063	4	Hex Head Cap Screw, 5/8"-11 x 10 1/2"
	G10230	4	Lock Washer, 5/8"
	G10104	4	Hex Nut, 5/8"-11
2.	GD14150	2	Clamp, 2" x 11 3/4"
3.	GA9896	1	Hitch
4.	GD8839	1	Pin, 1 1/4" x 6 1/4"
	G10460	2	Cotter Pin, 1/4" x 2"
5.	GA6177	1	Clevis W/Grease Fitting
	G10640	-	Grease Fitting, 1/4"-28
6.	GD7817-14	4	Spacer, 11/16" I.D. x 7 7/8" Long (If Applicable)

DECALS, PAINT AND MISCELLANEOUS



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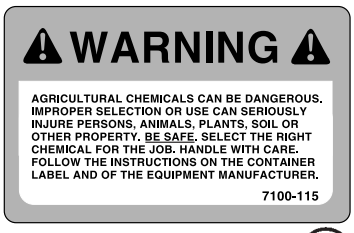


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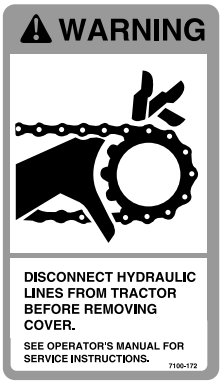

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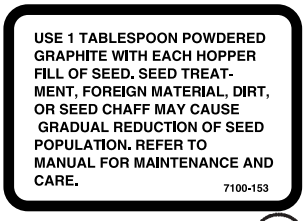
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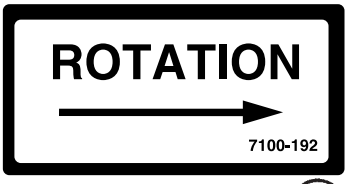
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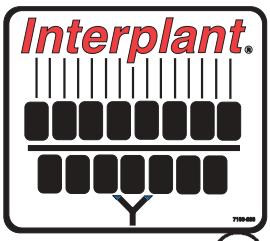
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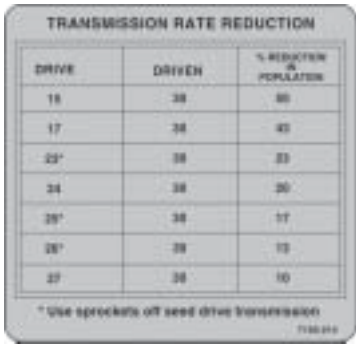
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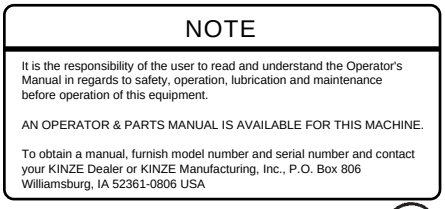
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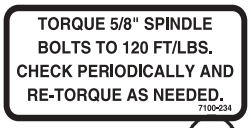
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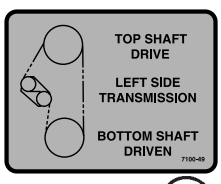
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DECALS, PAINT AND MISCELLANEOUS



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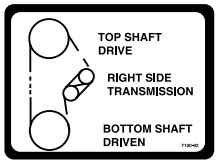
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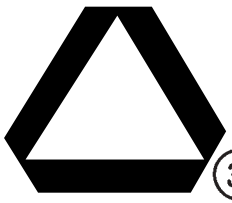
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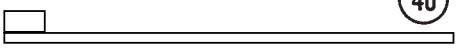


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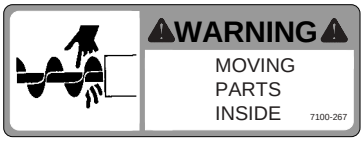

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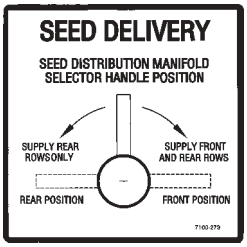

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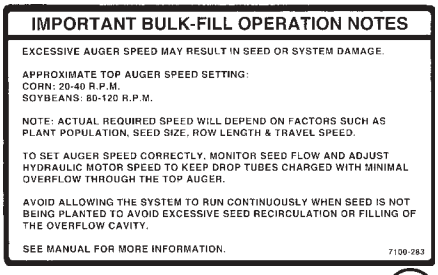
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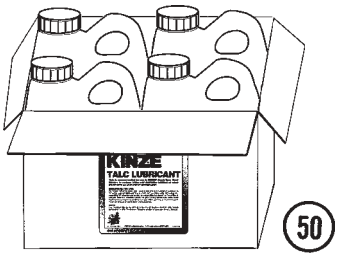


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ITEM	PART NO.	QTY.	DESCRIPTION
1.	G7100-02	3	Decal, Warning
2.	G7100-110	-	Decal, Grease Weekly
3.	G7100-111	-	Decal, Oil Daily
4.	G7100-116	-	Decal, Grease Daily
5.	G7100-277	-	Decal, Grease Annually
6.	G7100-115	-	Decal, Warning (1 Per Granular Chemical Hopper)
7.	G7100-117	1	Decal, Danger
8.	G7100-172	-	Decal, Warning
9.	G7100-153	-	Decal, Information (1 Per Brush-Type Seed Meter)
10.	G7100-177	1	Decal, Twin-Line®, 3/4" x 3"
11.	G7100-200	-	Decal, Warning
12.	G7100-192	-	Decal, Point Row Clutch Rotation
13.	G7100-201	1	Decal, Information
14.	G7100-208	-	Decal, Interplant®
15.	G7100-214	-	Decal, Two-Speed Point Row Clutch Rate Reduction
16.	G7100-215	1	Decal, Danger
17.	G7100-217	-	Decal, Note

DECALS, PAINT AND MISCELLANEOUS

ITEM	PART NO.	QTY.	DESCRIPTION
18.	G7100-219	-	Decal, Warning
19.	G7100-275	-	Decal, Warning
20.	G7100-234	-	Decal, Bolt Torque
21.	G7100-247	-	Decal, Logo, 4 3/8" x 4 1/2" (2 Per Row Unit)
	G7100-252	-	Decal, Logo, 3 1/2" x 3 5/8" (Hopper Panel Extension)
22.	G7100-264	2	Decal, 3650
23.	G7100-249	-	Decal, Caution
24.	G7100-248	-	Decal, Meter Alignment (1 Per Row Unit)
25.	G7100-42	4	Decal, Warning
26.	G7100-49	1	Decal, Left Side Transmission
27.	G7100-56	1	Decal, Warning
28.	G7100-46	1	Decal, Warning
29.	G7100-63	2	Decal, Caution
30.	G7100-68	3	Decal, Warning
31.	G7100-75	4	Decal, Caution
32.	G7100-83	2	Decal, Warning (1 Per Marker Lockup)
33.	G7100-89	2	Decal, Danger
34.	G7100-90	1	Decal, Warning
35.	G7100-92	1	Decal, Right Side Transmission
36.	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
	GD10057-05	-	Hose Identification Sleeve, Black AA
	GD10057-06	-	Hose Identification Sleeve, Black BB
37.	GD2199	1	SMV Sign
38.	G7100-258	-	Reflective Decal, Red, 1 1/2" x 9", Rectangular (If Applicable)
	G7100-259	-	Reflective Decal, Amber, 1 1/2" x 9", Rectangular (If Applicable)
	G7100-260	-	Reflective Decal, Orange, 1 1/2" x 9", Rectangular (If Applicable)
39.	G7100-261	-	Reflective Decal, Red, 1 3/4" x 9", Die-Cut (If Applicable)
	G7100-262	-	Reflective Decal, Amber, 1 3/4" x 9", Die-Cut (If Applicable)
	G7100-263	-	Reflective Decal, Orange, 1 3/4" x 9", Die-Cut (If Applicable)
40.	GD1512	-	Tie Strap, 7 1/2"
	GD2117	-	Tie Strap, 14 1/2"
	GD1162	-	Tie Strap, 28"
	GD2984	-	Tie Strap, 34"
41.	G7100-276	-	Reflective Decal, Orange, 1" x 2 1/4", Rectangular
42.	GD13706-01	-	Antislip Tape, 4" x 9"
	GD13706-02	-	Antislip Tape, 4" x 12"
	GD13706-03	-	Antislip Tape, 4" x 16"
43.	G7100-267	-	Decal, Warning
44.	G7100-266	-	Decal, Danger
45.	G7100-279	-	Decal, Seed Delivery (Located On Underside Of Hopper Lid)
46.	G7100-283	-	Decal, Important (Located On Underside Of Hopper Lid)
47.	GM0175	-	Operator & Parts Manual, Model 3650
48.	GR0146	-	Powdered Graphite, 1 Pound Container
	GR0146MPP	-	Powdered Graphite, Twenty-Four 1 Pound Containers
49.	GR0155	-	Blue Paint, Aerosol Can (Shown)
	GR0155MPP	-	Blue Paint, Twelve Aerosol Cans
50.	GR1570MPP	-	Talc Lubricant, Four 8 Pound Containers