

**RAM-GEAR MANUFACTURING CO.**  
2017 Energy Avenue  
P.O. Box 1369  
Alice, Texas 78333-1369

# **NATIONAL PUMPING UNITS**

**INSTALLATION  
LUBRICATION  
OPERATION**

## **Models**

**F114-173C-64**

**F160-200C-74**

**F228-246C-86**

**F320-305C-100**

**F114-143C-74**

**F160-173C-86**

**F228-213C-100**

**F320-256C-120**

Serial Number \_\_\_\_\_



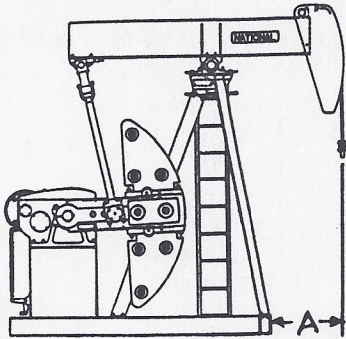
**National Supply Company**

Bulletin No. \_\_\_\_\_

ASSEMBLY - REFER TO DRAWING

ON PAGE 11

1. Using shipped separate parts lists for unit and drive accessories - identify and check off all parts. If shortages occur, arrange for replacement material.  
NOTE: All fasteners are grade 5 or better.
2. Set base with reducer on foundation. The top flanges of the base should be level in all directions within a maximum of 1/16". Refer to drawing below for unit to well centerline dimensions.



UNIT	A
F-114-143C-74	64"
F-114-169C-64	51-3/8"
F-160-173C-86	77-3/8"
F-160-200C-74	61-3/4"
F-228-213C-100	90-5/8"
F-228-246C-86	72-5/8"
F-320-256C-120	110"
F-320-305C-100	84-1/4"

3. Unit should be grouted under all beams for best support and minimum stressing. A minimum grout thickness of 1" is recommended.
4. Fasten back leg of samson post to the front legs. Leave these bolts \* (5) loose until complete samson post is mounted on base.
5. Attach ladder to samson post using bolts \* (3)
6. Mount the assembled samson post and ladder on the base. Tighten all samson post bolts \* (5) securely.
7. Attach bottom ladder brackets and ladder to main runner and tighten all bolts \* (2)

\* Refer to drawing on page 11 for additional nuts, washers etc. to use with these bolts.

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8. Position pitman assembly on ground with pitman arms spread outward. Note position of small drilled holes in top of pitman beam and position them on same side as pitman shaft grease fitting. Place walking beam with pitman bearing on pitman assembly. Install caps (33) and torque bolts (8) to value shown below.

Pitman lubrication line (45) and hoses (43) can be assembled at this time if desired.

F-114	F-160	F-228	F-320
1-1/8"x8-3/4"	1-1/4"x10"	1-3/8"x10-1/2"	1-1/2"x12"
1000 Ft. Lbs.	1350 Ft. Lbs.	1850 Ft. Lbs.	2150 Ft. Lbs.

9. The arc can be assembled to the beam at this time or it can be placed on the beam after the beam is mounted on the unit. Assemble carrier bar to bridle and install bridle to arc. Install square head set screws (10) for arc adjustment in beam before assembling arc to unit.
10. If required, change the position of the wrist pin bearing cages at this time. Refer to page 5 for instructions.
11. Lift the walking beam assembly into position on top of samson post. Position pitman arms on the wrist pin cages.
12. Insert bolts (9) through wrist pin cages and pitman arms. Tighten the flexloc nuts (21) to the torque shown below.

F-114	F-160	F-228	F-320
1-1/4"x11"	1-3/8"x12-3/8"	1-3/8"x12-3/8"	1-1/2"x14"
600 Ft. Lbs.	800 Ft. Lbs.	800 Ft. Lbs.	2150 Ft. Lbs.

13. Install bolts (6) nuts (17) and washers (24) (29) that fasten saddle bearing to the top of the samson post. Leave this connection loose until the unit is aligned to the well.
14. Assemble the saddle, adjusting set screws (11) and lock nuts (18) in the brackets welded on the top of the samson post.
15. Check tightness of the "U" bolts which fasten the saddle bearing shaft to the walking beam.
16. Align walking beam over the base. Saddle bearing bolts (6) are still loose to allow alignment of beam. When pitman arms are properly aligned, they should be in a perpendicular plane as viewed from the rear of the unit with equal clearance for passage of cranks and counterweights.

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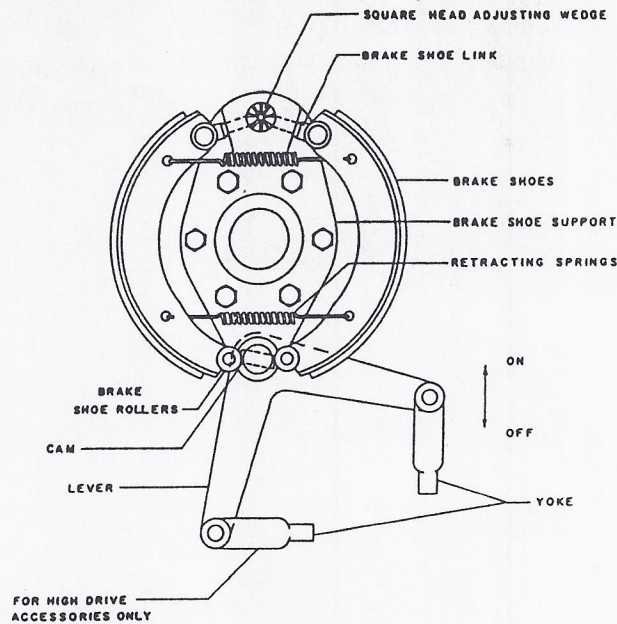
17. Align the arc over the well. Plumb bobs may be dropped from the cable tracks to check alignment. The arc may be moved sideways using the set screws (10) located in each side of the beam which will contact the inside of the arc to make this adjustment. The arc may be moved forward and backward using the set screws (11) in the top of the samson post to adjust the saddle bearing.
18. Adjust cable until the polished rod clamp support hangs level. Due to the stiffness of the cable it may be necessary to readjust this after the load is hung.
19. After final alignment of the unit is completed, tighten the saddle bearing bolts (6)
20. Install ground level lubrication lines (44) and (45) to pitman and saddle bearings.

CAUTION: The lubrication lines and hoses should be filled with the correct lubricant (see page 8) before being connected to the bearing assemblies in order to prevent air being pumped into the bearing which will result in inadequate lubrication.

21. Install grease fitting (46) in wrist pin bearing assemblies.
22. Lubricate unit as described on page 8 and 9.
23. Check tightness of sheave lock screws.
24. Assemble drive accessory items as shown on enclosed drawings.
25. Adjust brake assembly. See page 4.
26. Install counterweights as discussed on page 6 and 7.

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## ADJUSTMENT OF BRAKE



1. With the reach rod disconnected (lever against cast stop on gearbox) turn the square head adjusting wedge (right hand thread) until the brake shoes drag slightly on drum of sheave. Shake brake lever up and down to be sure that this is not a false adjustment. It may be necessary to repeat this to obtain a true adjustment because of the stiffness of new and freshly painted parts. Also, the brake shoe link has to seat properly in the serrations on the adjusting wedge. Due to the serrations on the adjusting wedge, considerable force is sometimes required to snap it over to a new groove when nearing proper adjustment.

ADJUST WEDGE UNTIL BRAKE SHOES ALMOST OR SLIGHTLY DRAG ON DRUM. IT IS IMPORTANT THAT THIS ADJUSTMENT BE MADE FIRST. A PROPERLY ADJUSTED BRAKE SHOULD BE FULLY SET WITH A VERTICAL LEVER MOVEMENT OF 1" OR 2".

2. With the brake shoes properly adjusted, install the reach rod. The yokes are easily removable to facilitate adjustment. The yokes should be screwed onto the reach rod far enough to get the proper braking action with the desired movement of the brake lever. THE ADJUSTMENT ON THE ENDS OF THE REACH ROD CANNOT BE USED FOR THE ADJUSTMENT OF THE BRAKE.

NOTE: The mechanical advantage of our brake linkage is such that adequate braking power is obtained without exerting all of a man's force on the brake lever. Due to this convenient feature, it is possible to damage the brake parts by abusive operation. APPLY ONLY THE FORCE REQUIRED TO SAFELY HOLD THE LOAD.

## REMOVAL OR INSTALLATION OF WRIST PIN

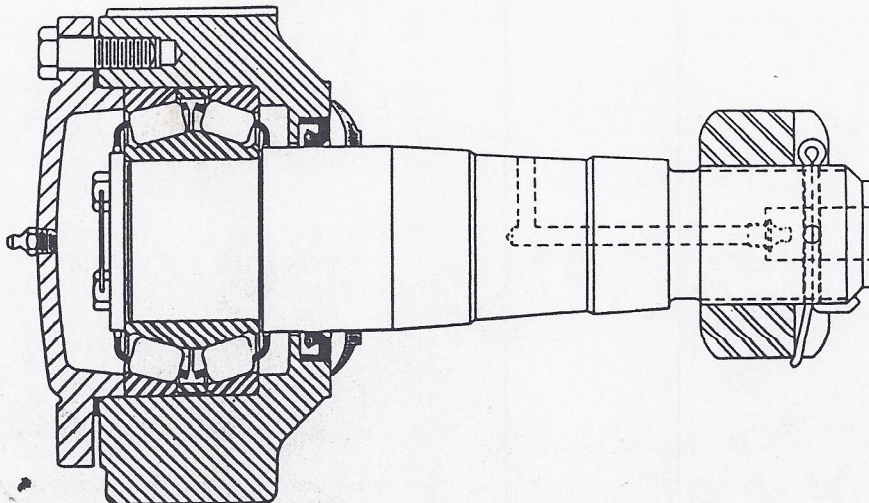
Change position of wrist pin bearing in crank as follows:

1. Remove cotter pin.
2. Loosen slotted nut several turns. (right hand threads)
3. Place the nozzle of a grease gun into the hole on the threaded end of wrist pin, onto the lubrication fitting. Pump grease until enough pressure is exerted to loosen the wrist pin. If necessary, tap the pad or threaded end with a hammer to assist in loosening the tapered wrist pin.
4. Thoroughly clean and smooth crank bore and wrist pin surface before reinstalling wrist pin into crank.
5. Insert wrist pin dry and fasten in place with nut. Tighten as follows: Then replace cotter pin.

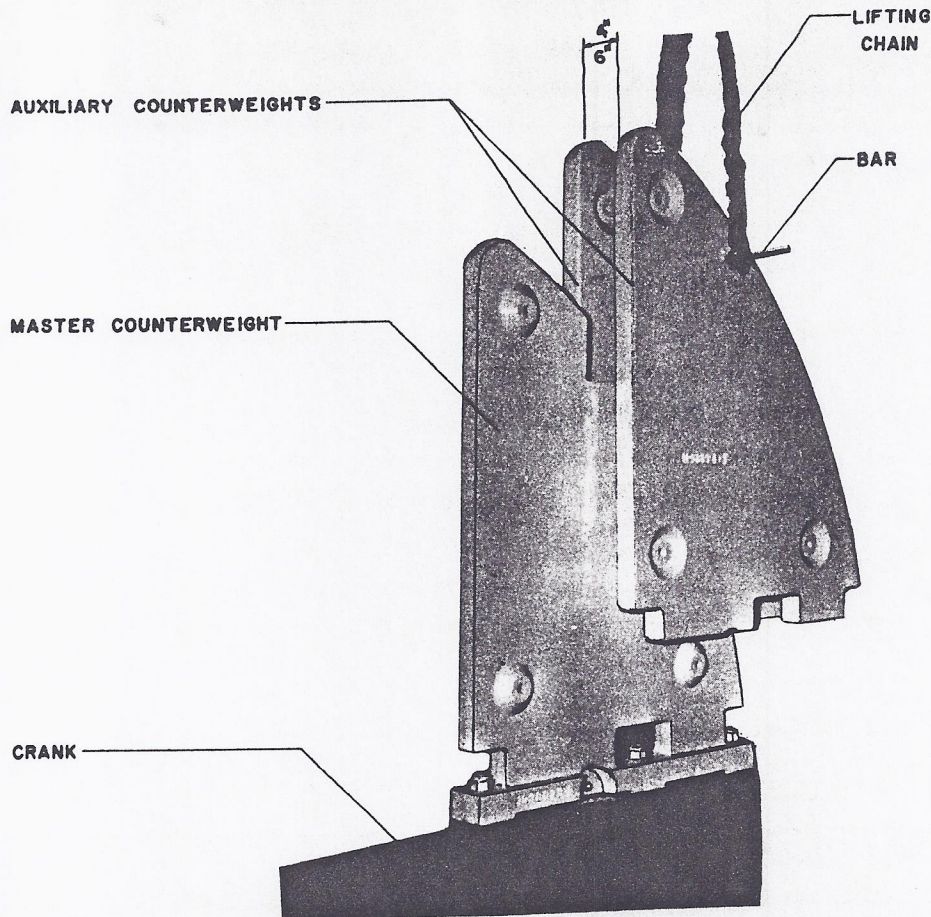
<u>UNIT STRUCTURE SIZE</u>	<u>*TORQUE (FOOT POUNDS)</u>
F-143C & F-169C	1600 (200lbs. on 8ft. wrench)
F-173C & F-200C	2000 (200lbs. on 10ft. wrench)
F-212C & F-246C	2000 (200lbs. on 10ft. wrench)
F-213C, F-256C, & F-298C	2000 (200lbs. on 10ft. wrench)

\* It is satisfactory to use slugging wrench and sledge, but be sure that tightening effect is at least equivalent to figures shown.

NOTE: Crank pin holes that are not in use should be coated with grease to protect the machined surfaces from rusting.



## ASSEMBLY & ADJUSTMENT OF COUNTERWEIGHTS



- A. Stop crank in horizontal position with side on which counterweight is to be mounted on top. Lock the brake.
- B. Place bolts in T-slot of crank and lower master counterweight onto the bolts. Locate counterweight in desired position and torque bolts (12) and nuts (20) to 550 Ft. Lbs. torque.

NOTE: If convenient, assemble the auxiliary weights to the master weight before placing on the crank.

- C. Assemble auxiliary counterweights to master counterweight. Bolt through conical sections as shown. An auxiliary counterweight can be mounted on either side or both sides of master counterweight as shown.

NOTE: Master counterweights have a cored lifting hole at the approximate center of weight. Auxiliary counterweights have a cored lifting hole near the top of weight.

- D. Move counterweights to desired position with pinion wrench. POSITION SAFETY STOP (4) into adjusting pinion recess on counterweights.

Counterweights may have to be repositioned slightly to align hole in the stop with the hole in the counterweight and the teeth on the stop with teeth in the crank. Tighten nut on safety stop bolt. Torque nuts on counterweight bolts to 550 ft. lbs.

E. If an additional auxiliary counterweight is to be added to a master counterweight with one auxiliary counterweight; remove the auxiliary counterweight that is mounted, then lift and assemble both auxiliary weights simultaneously, as shown on previous page.

F. ADJUSTMENT

To adjust counterweight, stop crank in a horizontal position with counterweight to be adjusted on the top side of the crank. Loosen nuts that hold counterweight to crank. Remove safety stop. Shake master counterweight to loosen any bond between counterweight and crank. Insert adjusting pinion into cored hole provided in counterweight and by turning pinion, move counterweight to desired position. Torque 1-1/4" nuts to 550 ft. lbs. on counterweight bolts.

NOTE: When mounting auxiliary counterweights, bolt heads must be positioned on inside (side facing gear reducer) to insure maximum clearance.

To prevent an undesirable lead or lag counterbalance condition, master counterweights and auxiliary counterweights should be bought in pairs and mounted in such a way that the combination of all weights form a symmetrical pattern on the cranks.



## LUBRICATION

### A. SADDLE, PITMAN AND WRIST PIN BEARINGS:

UNIT SHOULD BE LUBRICATED AT NO LESS THAN SIX MONTH INTERVALS.

The saddle, pitman, and wrist pin bearings are lubricated with EP grease when delivered to the customer. Lubricant must not channel at minimum operating temperatures. Use lubricant as follows:

<u>TEMPERATURE</u>	<u>* GREASE</u>		<u>** TRANSMISSION LUBRICANT</u>
50 F to 140 F	#2 EP	or	SAE 250
30 F to 100 F	#1 EP	or	SAE 140
0 F to 80 F	#1 EP	or	SAE 90
-50 F to 0 F		or	SAE 80

\* Preferably lithium base EP grease.

\*\* Preferably straight mineral type.

With abrasive sands blowing into the oil seals in most oil country locations, it is necessary to replace oil seals occasionally in order to properly retain the lubricant. In view of this retention problem, it is desirable in many areas to use grease lubricants instead of oil.

All bearing assemblies are fitted with a pressure relief fitting. Check these on saddle, pitman, and wrist pin bearings to be sure that the relief holes on each side of the fitting are free from paint and dirt. These relief fittings will relieve pressure and prevent blowout of the oil seal.

Fill saddle, pitman, and wrist pin bearing assemblies with the recommended lubricant. INJECT SLOWLY WITH GREASE GUN UNTIL PRESSURE OPENS RELIEF FITTINGS.

B. GEAR REDUCERS:

Before placing the unit in operation, fill gear case with the amount of oil specified on the instruction plate.

The viscosity recommendations in the following table are based on the air temperature surrounding the gear case.

<u>TEMPERATURE</u>	<u>AGMA INDUSTRIAL EP GEAR OIL</u>
+ 50°F to + 155°F	AGMA #7EP or ISO-VG Grade 460 (Viscosity 2214 to 2719 SSU @ 100°F)
+ 20°F to + 100°F	AGMA #6EP or ISO-VG Grade 320 (Viscosity 1533 to 1881 SSU @ 100°F)
- 20°F to + 60°F	AGMA #2EP or ISO-VG Grade 68 (Viscosity 318 to 389 SSU @ 100°F)
- 50°F to + 32°F	5W Automotive Engine Oil w/Foam Suppressant, Rust and Oxidation Inhibitors

Check oil frequently for presence of water or abrasive matter. If the oil is emulsified or contaminated or if the viscosity is incorrect for prevailing temperatures, the oil must be changed. Thoroughly flush the inside of the case before refilling with new oil. Operate idle gears occasionally to avoid corrosion.

KEEP OIL LEVEL BETWEEN HIGH AND LOW LEVEL PLUGS.

OIL CAPACITY

GEAR REDUCER	F-114D	F-160D	F-228D	F-320D
GALLONS	12	17	22	27

## GENERAL MAINTENANCE

If the pumping unit has been properly selected, installed, lubricated, and aligned over the well, the day-to-day maintenance will be reduced to a minimum. However, normal wear and changing well conditions require attention to assure continuing satisfactory operation of a unit.

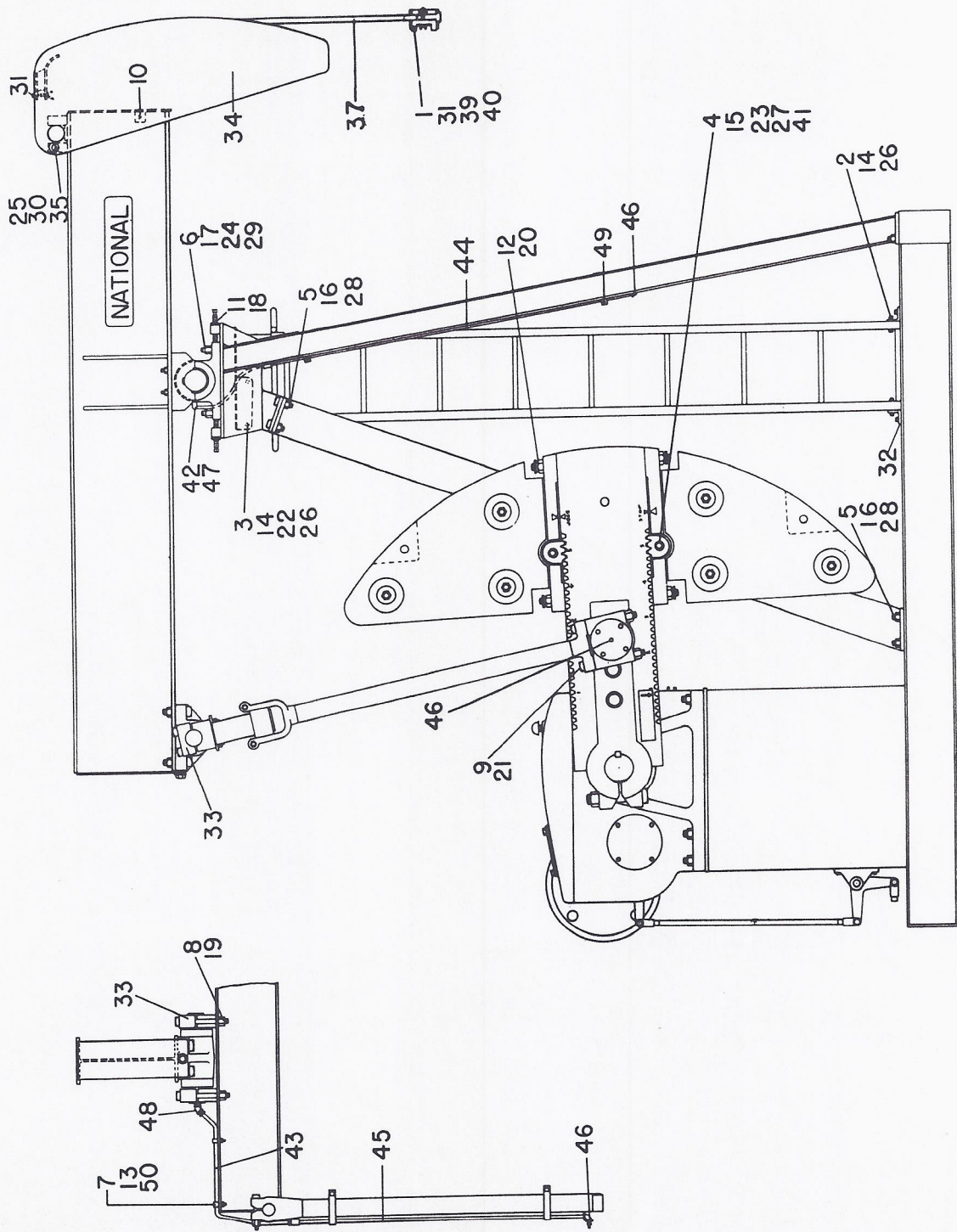
### WARNING — BEFORE SERVICING

1. Shut down or disengage the power source.
2. Shut down all accessory equipment.

Failure to shut down power before servicing can result in serious personal injury and property damage.

#### CHECK POINTS

- A. TIGHTNESS OF ALL BOLTS AND NUTS - Normal operations cause foundation and structural bolts to become loose. Prevent costly repairs by periodically tightening these bolts.
- B. LUBRICATION OF WRIST PIN, SADDLE AND PITMAN BEARINGS- Due to wear on oil seals and shafts, the interval of lubricating these bearings will change. Make sure these bearings are receiving proper lubrication.
- C. OIL IN GEAR REDUCER - Check for foreign matter, emulsification and sludging. Change or centrifuge oil at least once a year.
- D. COUNTERBALANCE OF UNIT - Well conditions change. Make sure your unit is properly counterbalanced and the counterweight bolts are tight.
- E. CONDITION OF BEARINGS - Check gear reducer bearings (crankshaft, intermediate and high speed pinion), wrist pin, saddle and pitman bearings for wear and fatigue failure.
- F. CONDITION OF OIL SEALS - The function of the oil seal is to contain lubricant in the bearings. Make sure the seals are in good condition.
- G. CONDITION OF BRIDLE - Check for rusted or frayed wires in the bridle. Change the bridle before failure.



**SHIPPED SEPARATE PARTS LIST  
REFER TO PAGE 11**

ITEM NO.	SIZE AND DESCRIPTION	NO.	UNIT SIZE	
			F114-173-64	F114-143C-74
1*	1/2"x3/4" S.ST. HEX HEAD CAP SCREW	2	7000301-30	2 7000301-30
2*	5/8"x1-3/4" HEX HEAD CAP SCREW	4	7000396-11	4 7000396-11
3	5/8"x2 1/4" HEX HEAD CAP SCREW	2	7000398-11	2 7000398-11
4*	3/4"x4" HEX HEAD CAP SCREW	4	7000448-11	4 7000448-11
5*	1"x2 1/2" HEX HEAD CAP SCREW	12	7000524	12 7000524
6*	1"x3 1/2" HEX HEAD CAP SCREW	2	7000528-10	2 7000528-10
7*	#8x1" ROUND HEAD SCREW	2	7051081-01	2 7051081-01
8*	1-1/8" -12x8-3/4" SQUARE HEAD BOLT	4	1037074	4 1037074
9*	1 1/4" -12x11" SQUARE HEAD BOLT	4	1022159	4 1022159
10*	5/8"x4 1/2" SQUARE HEAD SET SCREW	2	7018407	2 7018407
11*	5/8"x5" SQUARE HEAD SET SCREW	4	7016409	4 7016409
12*	1 1/4"x5-7/8" "T" BOLT FOR COUNTERWEIGHT	8	1037055	8 1037055
13*	#8 - 32 HEX NUT	2	6330080	2 6330080
14*	5/8" -11 UNC HEX NUT	4	6300103	4 6300103
15*	3/4" -10 UNC HEX NUT	4	6300121	4 6300121
16*	1" -8 UNC HEX NUT	12	6300160	12 6300160
17*	1" -8 UNC HEX NUT	2	6300160	2 6300160
18*	5/8" -11 UNC HEX JAM NUT	6	6320100	6 6320100
19*	1-1/8" -12 NF FLEXLOC NUT	4	6310180	4 6310180
20*	1 1/4" -7 UNC FLEXLOC NUT	8	6310201	8 6310201
21*	1 1/4" -12 NF FLEXLOC NUT	4	6310200	4 6310200
22*	5/8"x1-3/4" O.D. FLAT WASHER	2	7600042	2 7600042
23*	3/4"x2" O.D. FLAT WASHER	4	7600046	4 7600046
24*	1"x2 1/2" O.D. FLAT WASHER	2	7600054	2 7600054
25*	1"x2 1/2" O.D. FLAT WASHER	1	7600054	1 7600054
26*	5/8" SPRING LOCK WASHER	4	7619058	4 7619058
27*	3/4" SPRING LOCK WASHER	4	7619066	4 7619066
28*	1" SPRING LOCK WASHER	12	7602081	12 7602081
29*	1" SPRING LOCK WASHER	2	7602081	2 7602081
30*	1/2"x1 1/2" COTTER PIN	1	6501612	1 6501612
31*	1/4"x3" COTTER PIN	4	6501624	4 6501624
32	LADDER-BOTTOM BRACKET	2	1038139	2 1038139
33*	CAP, PITMAN BEARING	2	1037039	2 1037039
34	ARC ONLY	1	1037057	1 1038072
35*	ARC HINGE PIN	1	1040047	1 1040047
36	LENGTH OF HINGE PIN	-	15 1/2"	- 15 1/2"
37*	CABLE FOR ARC	1	1037059	1 1038058
38	SIZE AND LENGTH	-	7/8"x17"-5-3/4"	- 1"x19"-2-1/8"
39*	POLISHED ROD SUPPORT	1	1037069	1 1039030
40*	RETAINER PLATE-SUPPORT	1	1093371	1 1093370
41*	COUNTERWEIGHT STOP	4	1093321-P	4 1093321-P
42*	1/4"x20 1/2" LUBRICATION HOSE	1	6104018	1 6104018
43*	1/4"x43 1/2" LUBRICATION HOSE	1	6104024	1 6104024
44	1/4"x86" LUBRICATION LINE-PLAIN	1	1036043	1 1036043
45	1/4"x56" LUBRICATION LINE-W/CLAMPS	1	1093229	1 1093229
46*	1/8" STRAIGHT GREASE FITTING	4	7805052	4 7805052
47*	1/8"-90° SWIVEL UNION	1	7820002	1 7820002
48*	1/2" - 45° SWIVEL UNION	1	7820003	1 7820003
49*	3/8" CONDUIT CLAMP W/BOLT	2	7818190	2 7818190
50*	1/4" HOSE CLIP	2	7802202	2 7802202
51**	PINION, CWT. ADJUSTING	1	1033047	1 1033047
52**	WRENCH, WRIST PIN	1	1092759-P	1 1092759-P
53**	WRENCH, COUNTERWEIGHT	1	1093355	1 1093355
	* IN PARTS BOX			
	** FURNISH WITH EACH UNIT			

**SHIPPED SEPARATE PARTS LIST  
REFER TO PAGE 11**

ITEM NO.	SIZE AND DESCRIPTION	NO.	UNIT SIZE	
			F160-200C-74	F160-173C-86
1*	1/2"x3/4" S.ST. HEX HEAD CAP SCREW	2	7000301-30	2 7000301-30
2*	5/8"x1-3/4" HEX HEAD CAP SCREW	4	7000396-11	4 7000396-11
3	5/8"x2 1/2" HEX HEAD CAP SCREW	2	7000399-11	2 7000399-11
4*	3/4"x4" HEX HEAD CAP SCREW	4	7000448-11	4 7000448-11
5*	1"x2 1/2" HEX HEAD CAP SCREW	14	7000524	14 7000524
6*	1-1/8"x4" HEX HEAD CAP SCREW	2	7000568-10	2 7000568-10
7*	#8x1" ROUND HEAD SCREW	2	7051081-01	2 7051081-01
8*	1 1/4" -12NFx10" SQUARE HEAD BOLT	4	1038057	4 1038057
9*	1-3/8" -12 NFx12-3/8" SQUARE HEAD BOLT	4	1021699	4 1021699
10*	1"x4" SQUARE HEAD SET SCREW	2	7016530-08	2 7016530-08
11*	5/8"x5" SQUARE HEAD SET SCREW	4	7016409	4 7016409
12*	1 1/2"x5-7/8" "T" BOLT FOR COUNTERWEIGHT	12	1037055	12 1037055
13*	#8 -32 HEX NUT	2	6330080	2 6330080
14*	5/8" - 11 UNC HEX NUT	6	6300103	6 6300103
15*	3/4" - 10 UNC HEX NUT	4	6300121	4 6300121
16*	1" - 8 UNC HEX NUT	14	6300160	14 6300160
17*	1-1/8" - 7 UNC HEX NUT	2	6300180	2 6300180
18*	5/8" - 11 UNC HEX JAM NUT	4	6320100	4 6320100
19*	1 1/2" - 12 NF FLEXLOC NUT	4	6310200	4 6310200
20*	1 1/2" - 7 UNC FLEXLOC NUT	12	6310201	12 6310201
21*	1-3/8" - 12 NF FLEXLOC NUT	4	6310220	4 6310220
22*	5/8"x1-3/4" O.D. FLAT WASHER	2	7600042	2 7600042
23*	3/4"x2" O.D. FLAT WASHER	4	7600046	4 7600046
24*	1-1/8"x2-3/4" O.D. FLAT WASHER	2	7600058	2 7600058
25*	1"x2 1/2" O.D. FLAT WASHER	1	7600054	1 7600054
26*	5/8" SPRING LOCK WASHER	6	7619058	6 7619058
27*	3/4" SPRING LOCK WASHER	4	7619066	4 7619066
28*	1" SPRING LOCK WASHER	14	7602081	14 7602081
29*	1-1/8" SPRING LOCK WASHER	2	7602090	2 7602090
30*	1/2"x1 1/2" COTTER PIN	1	6501612	1 6501612
31*	1/2"x3" COTTER PIN	4	6501624	4 6501624
32	LADDER-BOTTOM BRACKET	2	1038139	2 1038139
33*	CAP, PITMAN BEARING	2	1038059	2 1038059
34	ARC ONLY	1	1038072	1 1039064
35*	ARC HINGE PIN	1	1040047	1 1040047
36	LENGTH OF HINGE PIN	-	15 1/2"	- 15 1/2"
37*	CABLE FOR ARC	1	1038058	1 1039051
38	SIZE AND LENGTH	-	1"x19'-2-1/8"	- 1"x21'-1-7/8"
39*	POLISHED ROD SUPPORT	1	1039030	1 1039030
40*	RETAINER PLATE SUPPORT	1	1093370	1 1093370
41*	COUNTERWEIGHT STOP	4	1093321-P	4 1093321-P
42*	1/2"x20 1/2" LUBRICATION HOSE	1	6104018	1 6104018
43*	1/2"x41" LUBRICATION HOSE	1	6104023	1 6104023
44	1/4"x134" LUBRICATION LINE-PLAIN	1	1038056	1 1038056
45	1/4"x76" LUBRICATION LINE-W/CLAMPS	1	1093228	1 1093228
46*	1/8" STRAIGHT GREASE FITTING	4	7805052	4 7805052
47*	1/8"-90° SWIVEL UNION	1	7820002	1 7820002
48*	1/2" - 45° SWIVEL UNION	1	7820003	1 7820003
49*	3/8" CONDUIT CLAMP W/BOLT	2	7818190	2 7818190
50*	1/2" HOSE CLIP	2	7802202	2 7802202
51**	PINION, CWT. ADJUSTING	1	1033047	1 1033047
52**	WRENCH, WRIST PIN	1	1092829-P	1 1092829-P
53**	WRENCH, COUNTERWEIGHT	1	1093355	1 1093355
	* IN PARTS BOX			
	** FURNISH WITH EACH UNIT			

**SHIPPED SEPARATE PARTS LIST  
REFER TO PAGE 11**

ITEM NO.	SIZE AND DESCRIPTION	NO.	UNIT SIZE	
			F228-246C-86	F228-213C-100
1*	1/2"x3/4" S.ST. HEX HEAD CAP SCREW	2	7000301-30	7000301-30
2*	5/8"x1-3/4" HEX HEAD CAP SCREW	4	7000396-11	7000396-11
3*	5/8"x2 1/2" HEX HEAD CAP SCREW	2	7000399-11	7000399-11
4*	3/4"x4" HEX HEAD CAP SCREW	4	7000448-11	7000448-11
5*	1"x2 1/2" HEX HEAD CAP SCREW	14	7000524	7000524
6*	1-1/8"x4" HEX HEAD CAP SCREW	2	7000568-10	7000568-10
7*	#8x1" ROUND HEAD SCREW	2	7051081-01	7051081-01
8*	1-3/8" -12NFx10 1/2" SQUARE HEAD BOLT	4	1039050	1039050
9*	1-3/8" -12NFx12-3/8" SQUARE HEAD BOLT	4	1021699	1021699
10*	1"x4" SQUARE HEAD SET SCREW	2	7016530-08	7016530-08
11*	5/8"x5" SQUARE HEAD SET SCREW	4	7016409	7016409
12*	1 1/4"x5-7/8" "T" BOLT FOR COUNTERWEIGHT	12	1037055	1037055
13*	#8 - 32 HEX NUT	2	6330080	6330080
14*	5/8" - 11UNC HEX NUT	6	6300103	6300103
15*	3/4" - 10UNC HEX NUT	4	6300121	6300121
16*	1" - 8UND HEX NUT	14	6300160	6300160
17*	1-1/8" - 7UNC HEX NUT	2	6300180	6300180
18*	5/8" - 11UNC HEX JAM NUT	4	6320100	6320100
19*	1-3/8" -12NF FLEXLOC NUT	4	6310220	6310220
20*	1 1/4" - 7UNC FLEXLOC NUT	12	6310201	6310201
21*	1-3/8" -12NF FLEXLOC NUT	4	6310220	6310220
22*	5/8"x1-3/4"O.D. FLAT WASHER	2	7600042	7600042
23*	3/4"x2"O.D. FLAT WASHER	4	7600046	7600046
24*	1-1/8"x2-3/4"O.D. FLAT WASHER	2	7600058	7600058
25*	1"x2 1/2"O.D. FLAT WASHER	1	7600054	7600054
26*	5/8" SPRING LOCK WASHER	6	7619058	7619058
27*	3/4" SPRING LOCK WASHER	4	7619066	7619066
28*	1" SPRING LOCK WASHER	14	7602081	7602081
29*	1-1/8" SPRING LOCK WASHER	2	7602090	7602090
30*	1/4"x1 1/2" COTTER PIN	1	6501612	6501612
31*	1/4"x3" COTTER PIN	4	6501624	6501624
32*	LADDER-BOTTOM BRACKET	2	1040038	1040038
33*	CAP. PTIMAN BEARING	2	1039052	1039052
34	ARC ONLY	1	1039064	1040030
35*	ARC HINGE PIN	1	1040047	1040047
36	LENGTH OF HINGE PIN	-	15 1/2"	15 1/2"
37	CABLE FOR ARC	1	1039051	1040032
38	SIZE AND LENGTH	-	1"x21'-1-7/8"	1-1/8"x24'-1-1/8"
39*	POLISHED ROD SUPPORT	1	1039030	1039030
40*	RETAINER PLATE-SUPPORT	1	1093370	1093370
41*	COUNTERWEIGHT STOP	4	1093321-P	1093321-P
42*	1/2"x20 1/2" LUBRICATION HOSE	1	6104018	6104018
43*	1/2"x41" LUBRICATION HOSE	1	6104023	6104023
44	1/2"x134" LUBRICATION LINE-PLAIN	1	1038056	1038056
45	1/2"x94" LUBRICATION LINE-W/CLAMPS	1	1093227	1093227
46*	1/8" STRAIGHT GREASE FITTING	4	7805052	7805052
47*	1/8"-90° SWIVEL UNION	1	7820002	7820002
48*	1/8"-45° SWIVEL UNION	1	7820003	7820003
49*	3/8" CONDUIT CLAMP W/BOLT	2	7818190	7818190
50*	1/4" HOSE CLIP	2	7802202	7802202
51**	PINION, CWT. ADJUSTING	1	1033047	1033047
52**	WRENCH, WRIST PIN	1	1092829-P	1092829-P
53**	WRENCH, COUNTERWEIGHT	1	1093355	1093355
	* IN PARTS BOX			
	** FURNISH WITH EACH UNIT			

**SHIPPED SEPARATE PARTS LIST  
REFER TO PAGE 11**

ITEM NO.	SIZE AND DESCRIPTION	NO.	UNIT SIZE			
			F320-305C-100	F320-256C-120		
1*	1/2"x3/4" S.ST	HEX HEAD CAP SCREW	2	7000301-30	2	7000301-30
2*	5/8"x1-3/4"	HEX HEAD CAP SCREW	4	7000396-11	4	7000396-11
3*	5/8"x2 1/2"	HEX HEAD CAP SCREW	2	7000399-11	2	7000399-11
4*	3/4"x4"	HEX HEAD CAP SCREW	4	7000448-11	4	7000448-11
5*	1-1/8"x3 1/4"	HEX HEAD CAP SCREW	14	7000565-11	14	7000565-11
6*	1 1/4"x5"	HEX HEAD CAP SCREW	2	7000614-10	2	7000614-10
7*	#8x1"	ROUND HEAD SCREW	2	7051081-01	2	7051081-01
8*	1 1/2" -UNCx12"	SQUARE HEAD BOLT	4	1040051	4	1040051
9*	1 1/2" -UNCx14"	SQUARE HEAD BOLT	4	1040050	4	1040050
10*	1"x4"	SQUARE HEAD SET SCREW	2	7016530-08	2	7016530-08
11*	1"x6"	SQUARE HEAD SET SCREW	4	7016538	4	7016538
12*	1 1/2"x5-7/8"	"T" BOLT FOR COUNTERWEIGHT	12	1037055	12	1037055
13*	#8 - 32	HEX NUT	2	6330080	2	6330080
14*	5/8" - 11UNC	HEX NUT	6	6300103	6	6300103
15*	3/4" - 10UNC	HEX NUT	4	6300121	4	6300121
16*	1-1/8" - 7UNC	HEX NUT	14	6300180	14	6300180
17*	1 1/2" - 7UNC	HEX NUT	2	6300200	2	6300200
18*	1" - 8UNC	HEX JAM NUT	4	6320160	4	6320160
19*	1 1/2" - 6UNC	FLEXLOC NUT	4	6310242	4	6310242
20*	1 1/2" - 7UNC	FLEXLOC NUT	12	6310201	12	6310201
21*	1 1/2" - 6UNC	FLEXLOC NUT	4	6310242	4	6310242
22*	5/8"x1-3/4" O.D.	FLAT WASHER	2	7600042	2	7600042
23*	3/4"x2" O.D.	FLAT WASHER	4	7600046	4	7600046
24*	1 1/4"x3" O.D.	FLAT WASHER	2	7600062	3	7600062
25*	1"x2 1/2" O.D.	FLAT WASHER	1	7600054	0	USE-1 1/2"x3" O.D.
26*	5/8"	SPRING LOCK WASHER	6	7619058	6	7619058
27*	3/4"	SPRING LOCK WASHER	4	7619066	4	7619066
28*	1-1/8"	SPRING LOCK WASHER	14	7602090	14	7602090
29*	1 1/2"	SPRING LOCK WASHER	2	7602098	2	7602098
30*	1/4"x1 1/2"	COTTER PIN	1	6501612	1	6501612
31*	1/4"x3"	COTTER PIN	4	6501624	4	6501624
32*		LADDER-BOTTOM BRACKET	2	1040038	2	1040038
33*		CAP, PITMAN BEARING	2	1040012	2	1040012
34		ARC ONLY	1	1040030	1	1040031
35*		ARC HINGE PIN	1	1040047	1	1040048
36		LENGTH ON HINGE PIN	-	15 1/2"	-	16 1/2"
37		CABLE FOR ARC	1	1040032	1	1040043
38		SIZE AND LENGTH	-	1-1/8"x24'-1-1/8-	-	1-1/8"x27'-4-3/8
39*		POLISHED ROD SUPPORT	1	1039030	1	1039030
40*		RETAINER PLATE-SUPPORT	1	1093370	1	1093370
41*		COUNTERWEIGHT STOP	4	1093321-P	4	1093321-P
42*	1/4"x24"	LUBRICATION HOSE	1	6104019	1	6104019
43*	1/4"x43 1/2"	LUBRICATION HOSE	1	6104024	1	6104024
44*	1/4"x158"	LUBRICATION LINE-PLAIN	1	1040053	1	1040053
45*	1/4"x106"	LUBRICATION LINE-W/CLAMPS	1	1040054	1	1040054
46*		1/8" STRAIGHT GREASE FITTING	4	7805052	4	7805052
47*		1/8"-90° SWIVEL UNION	1	7820002	1	7820002
48*		1/8"-45° SWIVEL UNION	1	7820003	1	7820003
49*		3/8" CONDUIT CLAMP W/BOLT	2	7818190	2	7818190
50*		1/4" HOSE CLIP	2	7802202	2	7802202
51**		PINION, CWT ADJUSTING	1	1033047	1	1033047
52**		WRENCH, WRIST PIN	1	1040070-P	1	1040070-P
53**		WRENCH, WRIST COUNTERWEIGHT	1	1093355	1	1093355
	* IN PARTS BOX					
	** FURNISH WITH EACH UNIT					



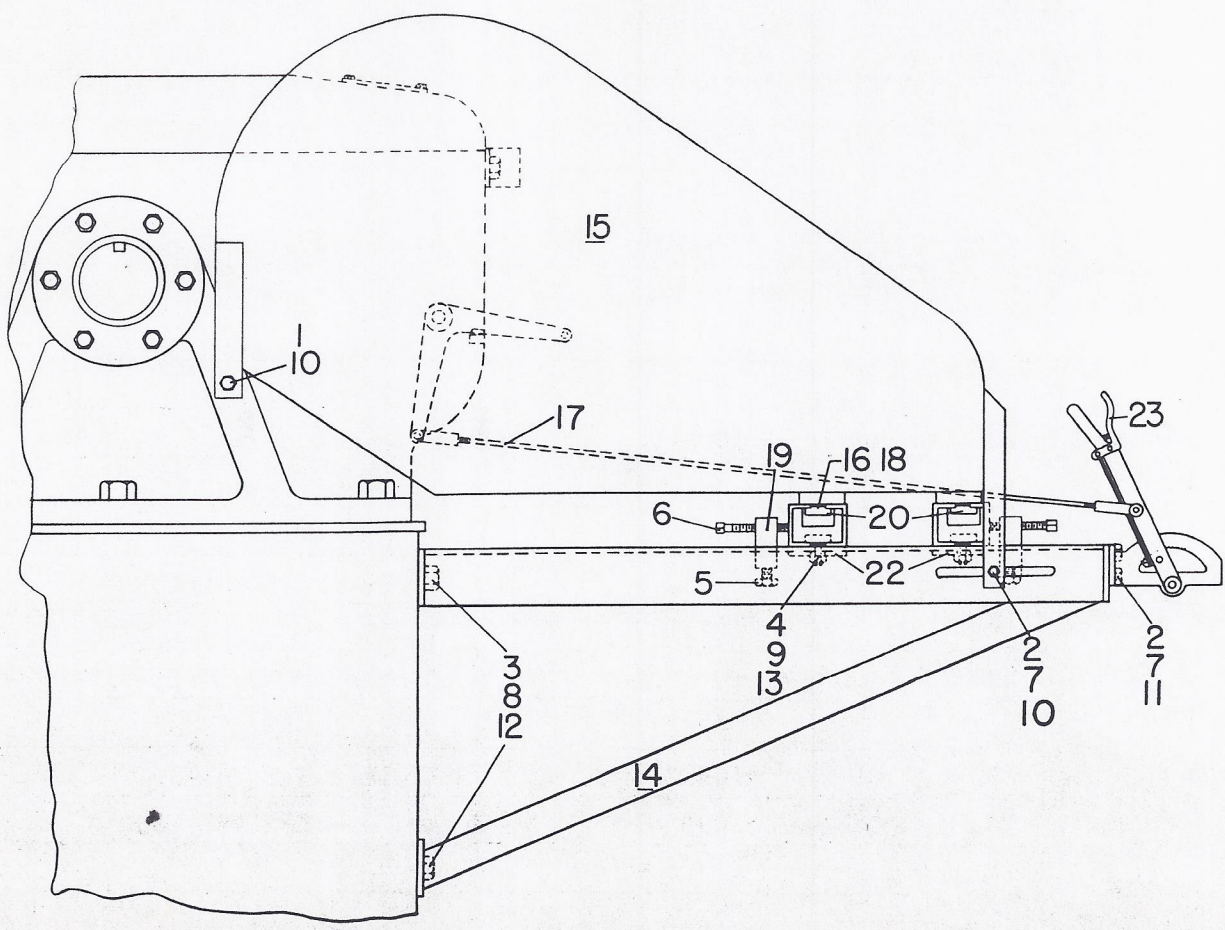
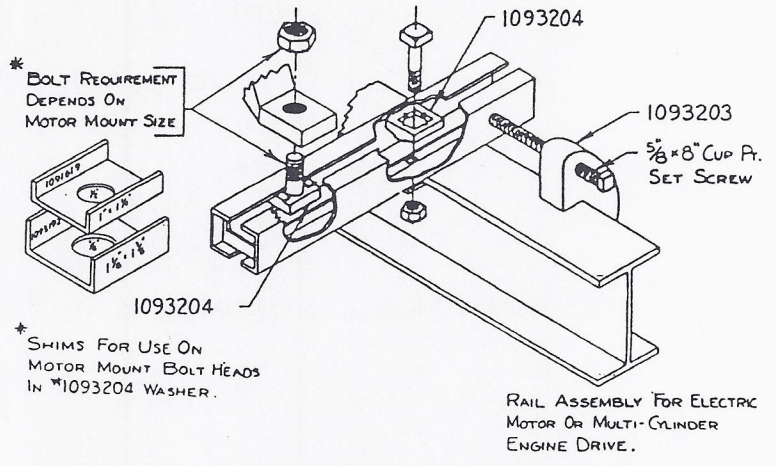
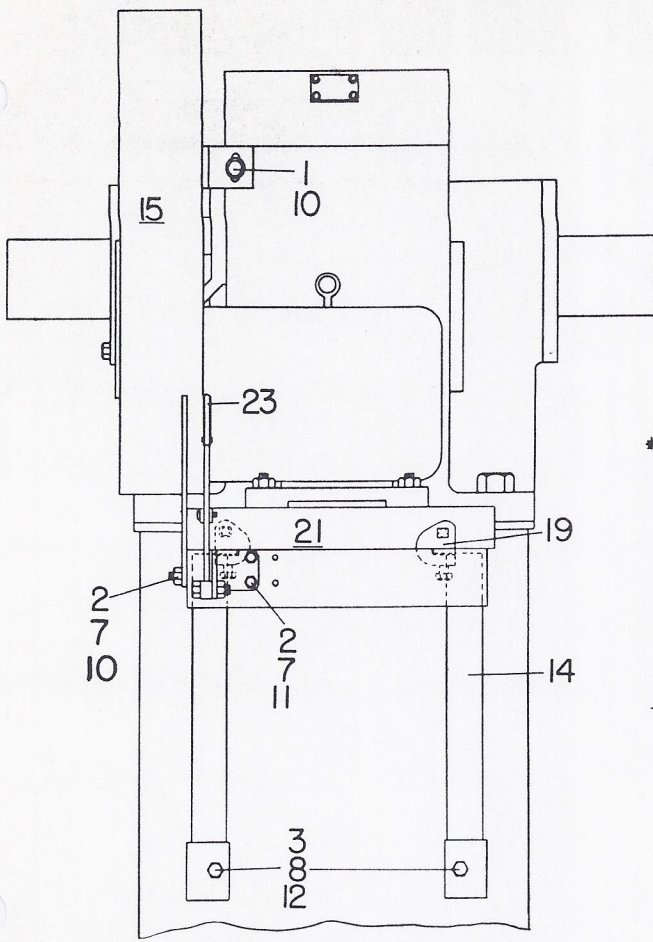
## PUMPING UNIT DRIVE ACCESSORIES

Shipped Separate Parts List

Pumping Unit Size F114-173C-64 or F114-143C-74Drive Accessory No. 36-2A Type High Drive

ITEM NO.	QUANTITY	PART NUMBER	DESCRIPTION
1	2	7000303-11	1/2"x1" Cap Screw
2	3	7000305-11	1/2"x1 1/2" Cap Screw
3	5	7000438-11	3/4"x1 1/2" Cap Screw
4	4	5500354	7/8"x2 1/2" Cap Screw - Square Head
5	2	7016399	5/8"x2 1/2" Square head set screw
6	2	7016421	5/8"x8" Square head set screw
7	3	6300081	1/2" Hex nut
8	5	6300121	3/4" Hex nut
9	4	6300149	7/8" Hex nut
10	3	7621034	1/2" Flat washer
11	2	7619050	1/2" Spring lock washer
12	5	7619066	3/4" Spring lock washer
13	4	7619074	7/8" Spring lock washer
14	1	1034070	High Drive Platform
15	1	1036104	Belt Guard
16	4	1091619	Shim for Motor Bolt Head
17	1	1093119	Reach Rod - 7/16"x46 1/2" long
18	4	1093192	Shim for Motor Bolt
19	2	1093203	Rail Adj. Screw Body
20	8	1093204	Rail Bolt Washer
21	2	1093210	Motor Rails - 22" long
22	4	1093213	Rail Clamp - 2 1/2"x3-3/4"
23	1	1093287	Brake Lever - 14 1/2" long

Drive Assy No. 36-2A Type High Drive



PUMPING UNIT DRIVE ACCESSORIES

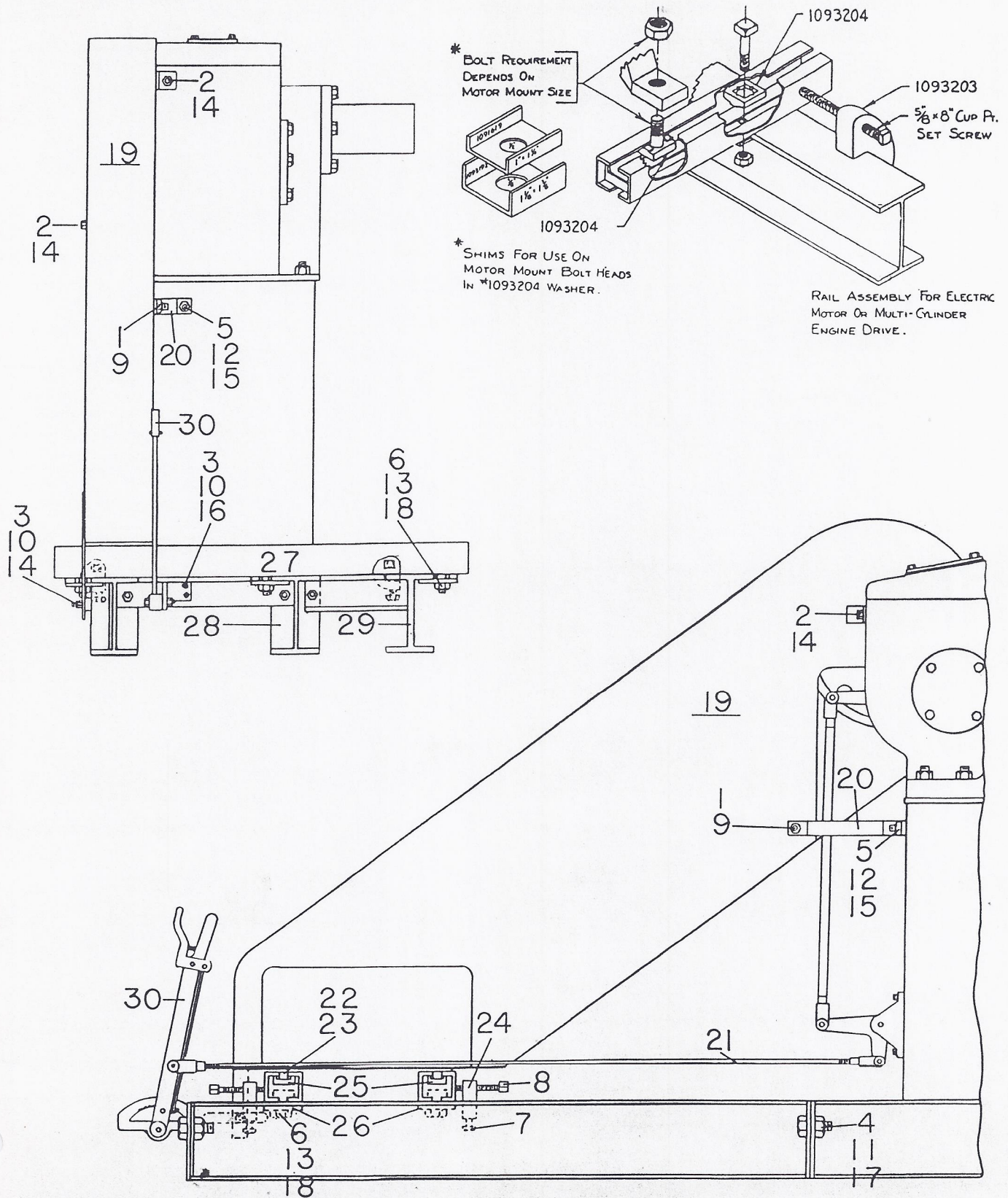
Shipped Separate Parts List

Pumping Unit Size F114-173C-64 or F114-143C-74

Drive Accessory No. 37-1C Type High Speed Engine

ITEM NO.	QUANTITY	PART NUMBER	DESCRIPTION
1	1	7000206-11	3/8"x3/4" Cap Screw
2	2	7000303-11	1/2"x1" Cap Screw
3	3	7000305-11	1/2"x1 1/2" Cap Screw
4	4	7000397-11	5/8"x2" Cap Screw
5	1	7000439-11	3/4"x1-3/4" Cap Screw
6	6	5500354	7/8"x2 1/2" Cap Screw - Square Head
7	2	7016399	5/8"x2 1/2" Square Head Set Screw
8	2	7016421	5/8"x8" Square Head Set Screw
9	1	6300060	3/8" Hex Nut
10	3	6300081	1/2" Hex Nut
11	4	6300103	5/8" Hex Nut
12	1	6300121	3/4" Hex Nut
13	6	6300149	7/8" Hex Nut
14	3	7621034	1/2" Flat Washer
15	1	7621044	3/4" Flat Washer
16	2	7619050	1/2" Spring Lock Washer
17	4	7619058	5/8" Spring Lock Washer
18	6	7619074	7/8" Spring Lock Washer
19	1	1037102	Belt Guard
20	1	1037155	Belt Guard Brace
21	1	1090689	Reach Rod - 7/16"x7'6" Long
22	4	1091619	Shim for Motor Bolt Head
23	4	1093192	Shim for Motor Bolt Head
24	2	1093203	Rail Adj. Screw Body
25	10	1093204	Rail Bolt Washer
26	6	1093205	Rail Clamp - 2 1/2"x3-3/4"
27	2	1093217	Motor Rail - 4'8" Long
28	1	1093245	Extension Base
29	1	1093247	Outrigger for Base
30	1	1093287	Brake Lever - 14 1/2" Long
			* Bellcrank installed on unit

# Drive Assy No. 37-1C Type High Speed Engine













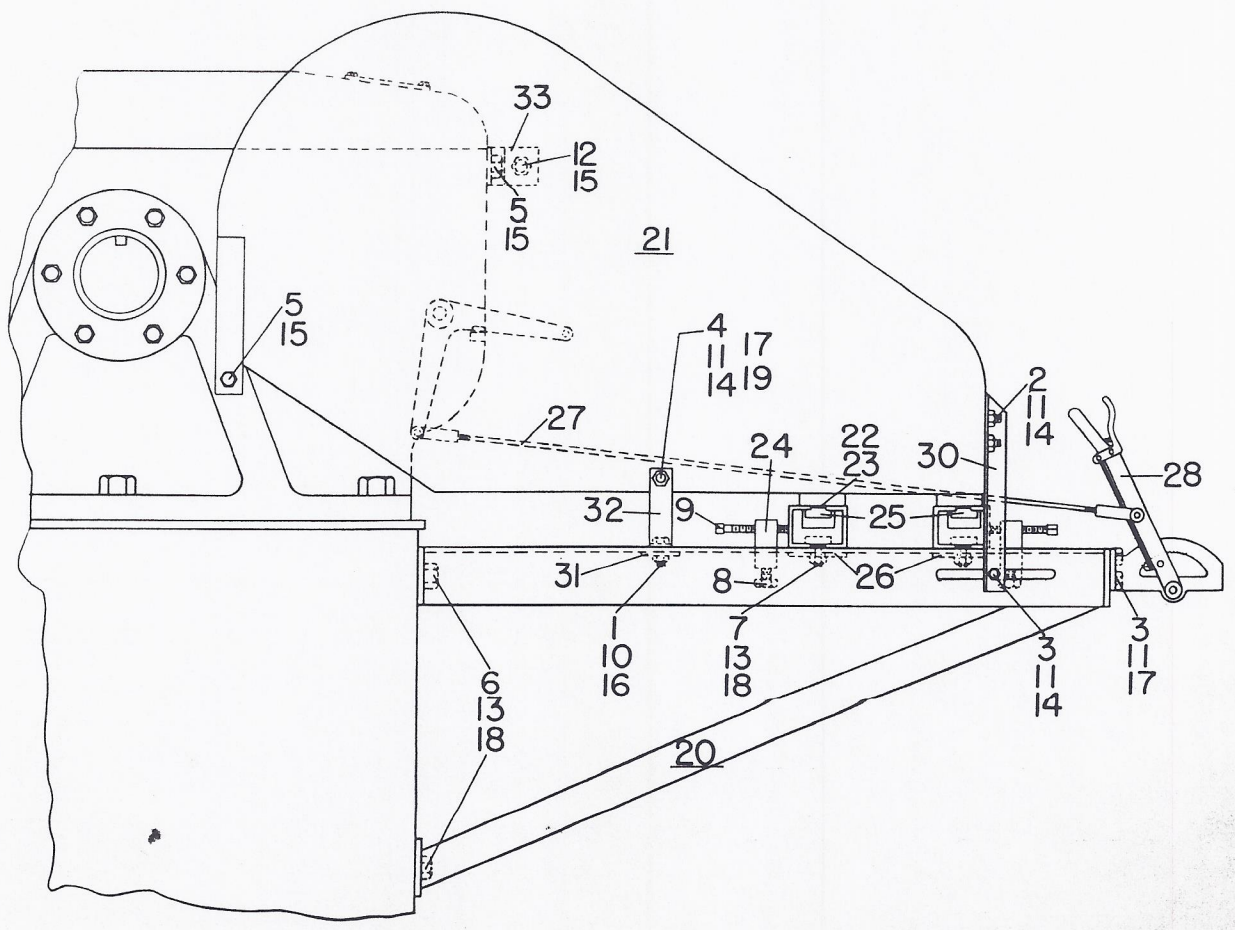
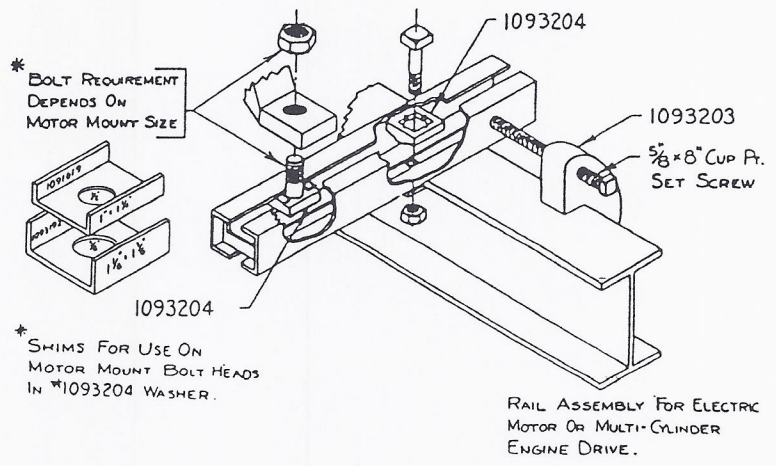
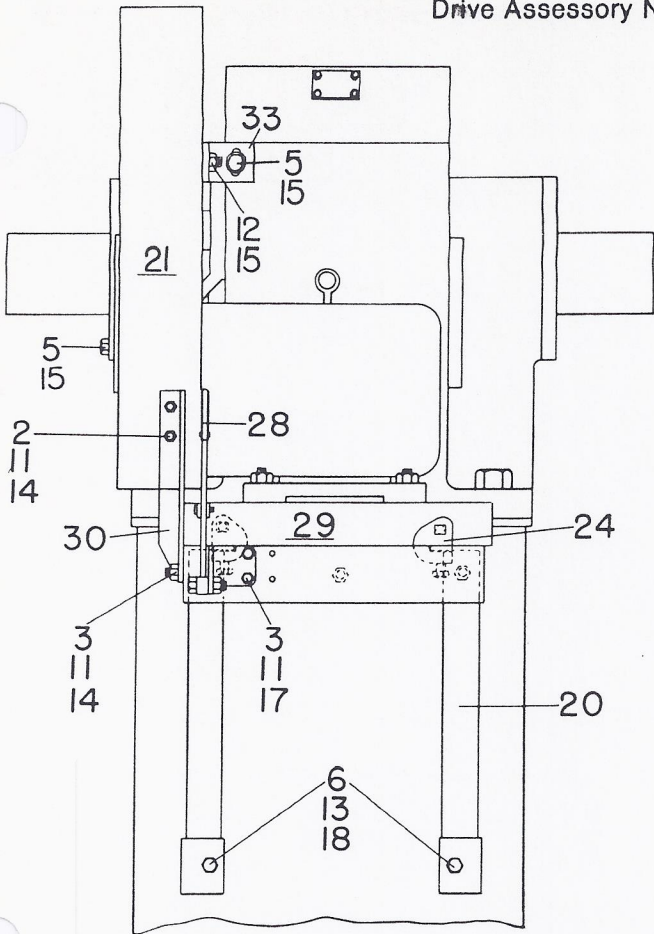
## PUMPING UNIT DRIVE ACCESSORIES

## Shipped Separate Parts List

Pumping Unit Size F160-200C-74 or F160-173C-86Drive Accessory No. 37-2A Type High Drive

ITEM NO.	QUANTITY	PART NUMBER	DESCRIPTION
1	1	7000210-11	3/8"x1½" Cap Screw
2	2	7000303-11	½"x1" Cap Screw
3	3	7000305-11	½"x1½" Cap Screw
4	1	5501331	½"x8½" Cap Screw
5	2	7000394-11	5/8"x1¼" Cap Screw
6	5	7000483-10	7/8"x2¼" Cap Screw
7	4	5500354	7/8"x2½" Cap Screw - Square Head
8	2	7016399	5/8"x2½" Square Head Set Screw
9	2	7016421	5/8"x8" Square Head Set Screw
10	1	6300060	3/8" Hex Nut
11	5	6300081	½" Hex Nut
12	1	6300103	5/8" Hex Nut
13	9	6300149	7/8" Hex Nut
14	5	7621034	½" Flat Washer
15	3	7621042	5/8" Flat Washer
16	1	7619041	3/8" Spring Lock Washer
17	3	7619050	½" Spring Lock Washer
18	9	7619074	7/8" Spring Lock Washer
19	1		½" Pipe - 7½" Long
20	1	1037078	High Drive Platform
21	1	1037104	Belt Guard
22	4	1091619	Shim for Motor Bolt Head
23	4	1093192	Shim for Motor Bolt Head
24	2	1093203	Rail Adj. Screw Body
25	8	1093204	Rail Bolt Washer
26	4	1093213	Rail Clamp - 2½"x3-3/4"
27	1	1093292	Reach Rod - 5/8"x56" Long
28	1	1093293	Brake Lever - 24" Long
29	2	1093294	Motor Rail - 27" Long
30	1	1093361	Belt Guard Angle - 14" Long
31	1	1093362	Rail Clamp - 2"x3"
32	1	1093363	Belt Guard Center Support
33	1	1093368	Belt Guard Bracket - 2½" Long

Drive Assy No. 37-2A Type High Drive



PUMPING UNIT DRIVE ACCESSORIES

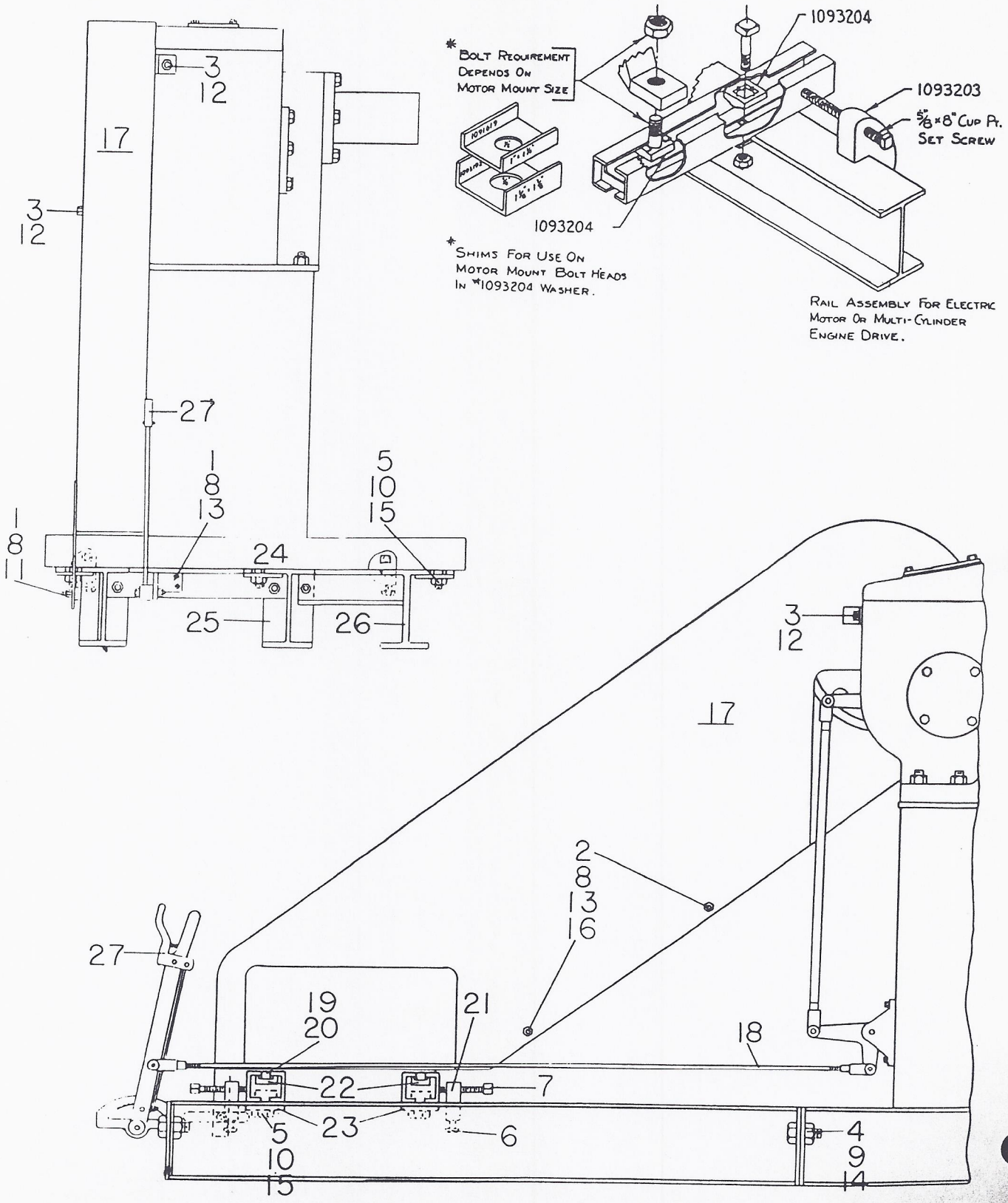
Shipped Separate Parts List

Pumping Unit Size F160-200C-74 or F160-173C-86

Drive Accessory No. 38-1C Type High Speed Engine

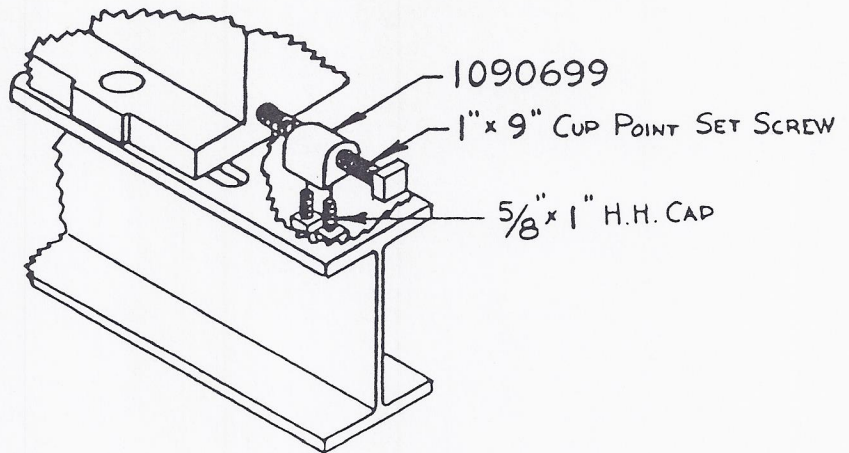
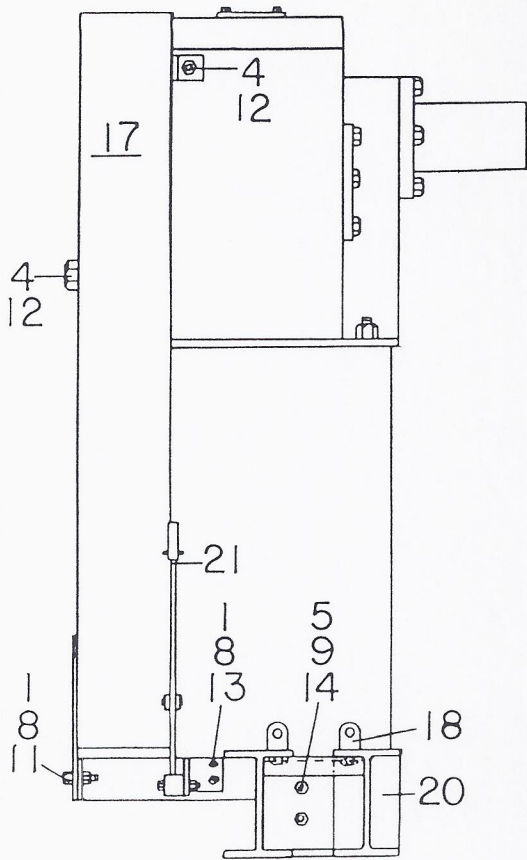
ITEM NO.	QUANTITY	PART NUMBER	DESCRIPTION
1	3	7000305-11	1/2"x1 1/2" Cap Screw
2	2	5501331	1/2"x8 1/2" Cap Screw
3	2	7000394-11	5/8"x1 1/4" Cap Screw
4	4	7000397-11	5/8"x2" Cap Screw
5	6	5500354	7/8"x2 1/2" Cap Screw - Square Head
6	2	7016399	5/8"x2 1/2" Square Head Set Screw
7	2	7016421	5/8"x8" Square Head Set Screw
8	5	6300081	1/2" Hex Nut
9	4	6300103	5/8" Hex Nut
10	6	6300149	7/8" Hex Nut
11	2	7621034	1/2" Flat Washer
12	2	7621042	5/8" Flat Washer
13	4	7619050	1/2" Spring Lock Washer
14	4	7619058	5/8" Spring Lock Washer
15	6	7619074	7/8" Spring Lock Washer
16	2		1/2" Pipe - 7 1/2" Long
17	1	1038103	Belt Guard
18	1	1090939	Reach Rod - 5/8"x8'5"
19	4	1091619	Shim for Motor Bolt Head
20	4	1093191	Shim for Motor Bolt Head
21	2	1093203	Rail Adj. Screw Body
22	10	1093204	Rail Bolt Washer
23	6	1093205	Rail Clamp - 2 1/2"x3-3/4"
24	2	1093217	Motor Rail - 4'8" Long
25	1	1093246	Extension Base
26	1	1093247	Outrigger for Base
27	1	1093293	Brake Lever - 24" Long
			* Bellcrank installed on unit

Drive Assy No. 38-1C Type High Speed Engine

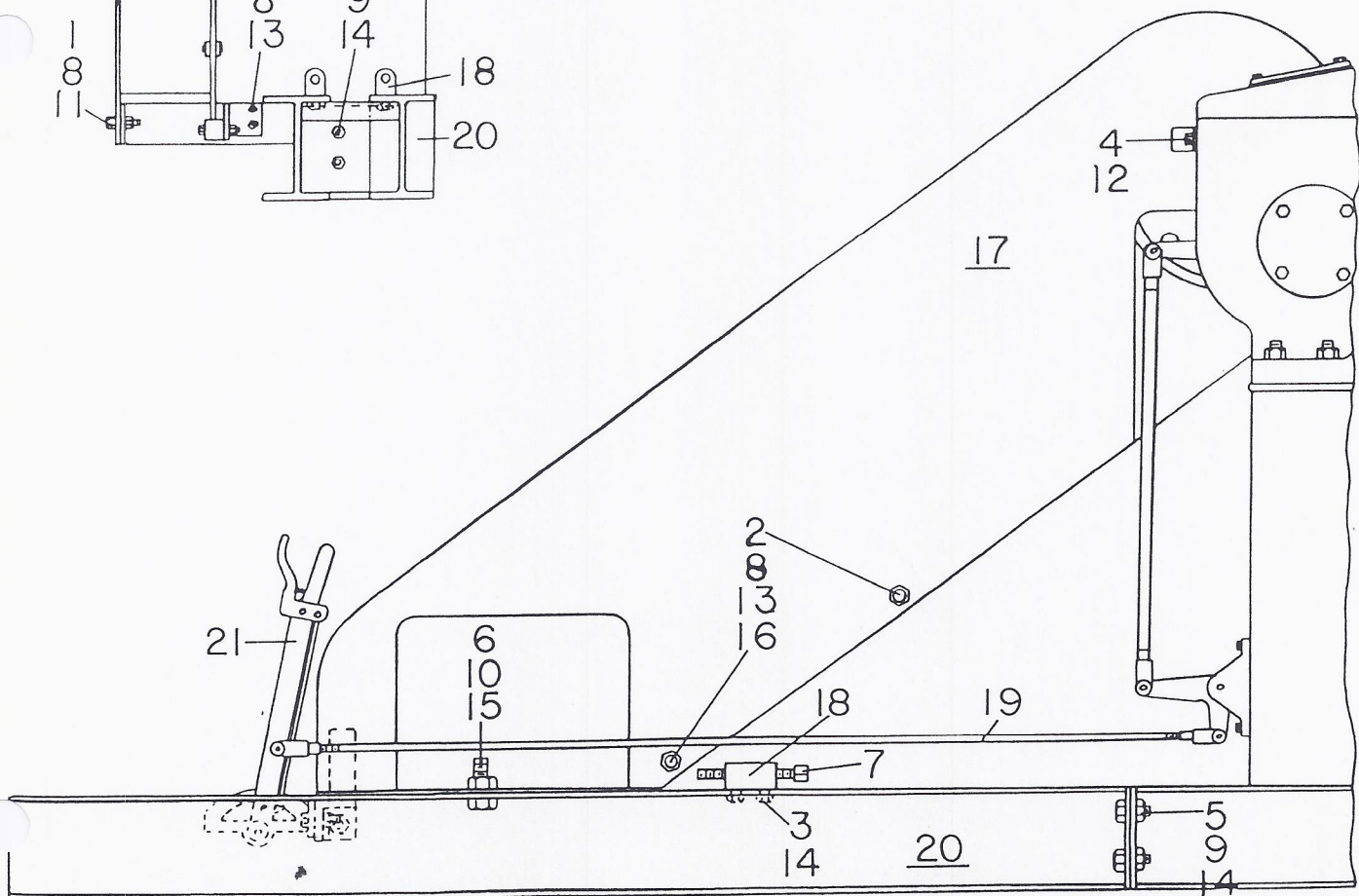




Drive Assy No. 38-1F Type 8" Ajax Drive

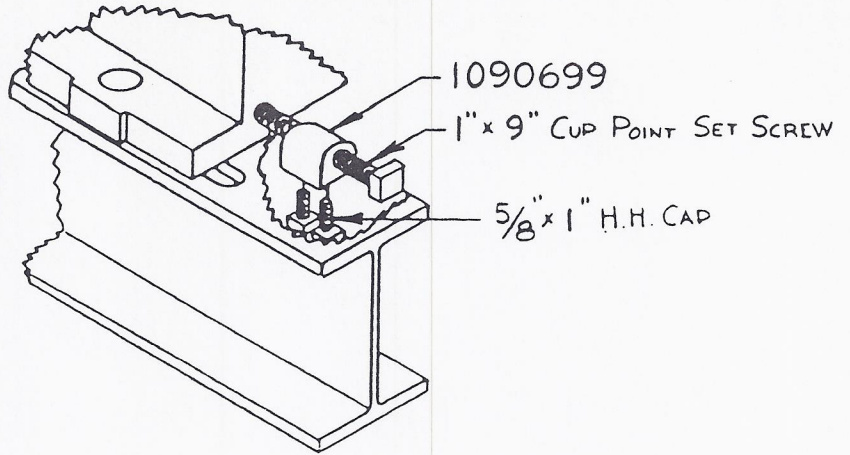
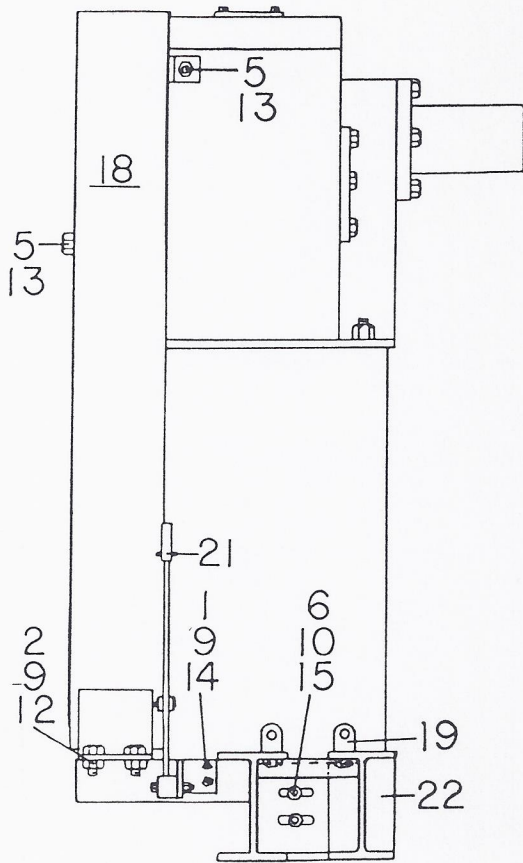


ADJUSTING SCREW ASSEMBLY FOR AJAX OR OTHER ENGINES.

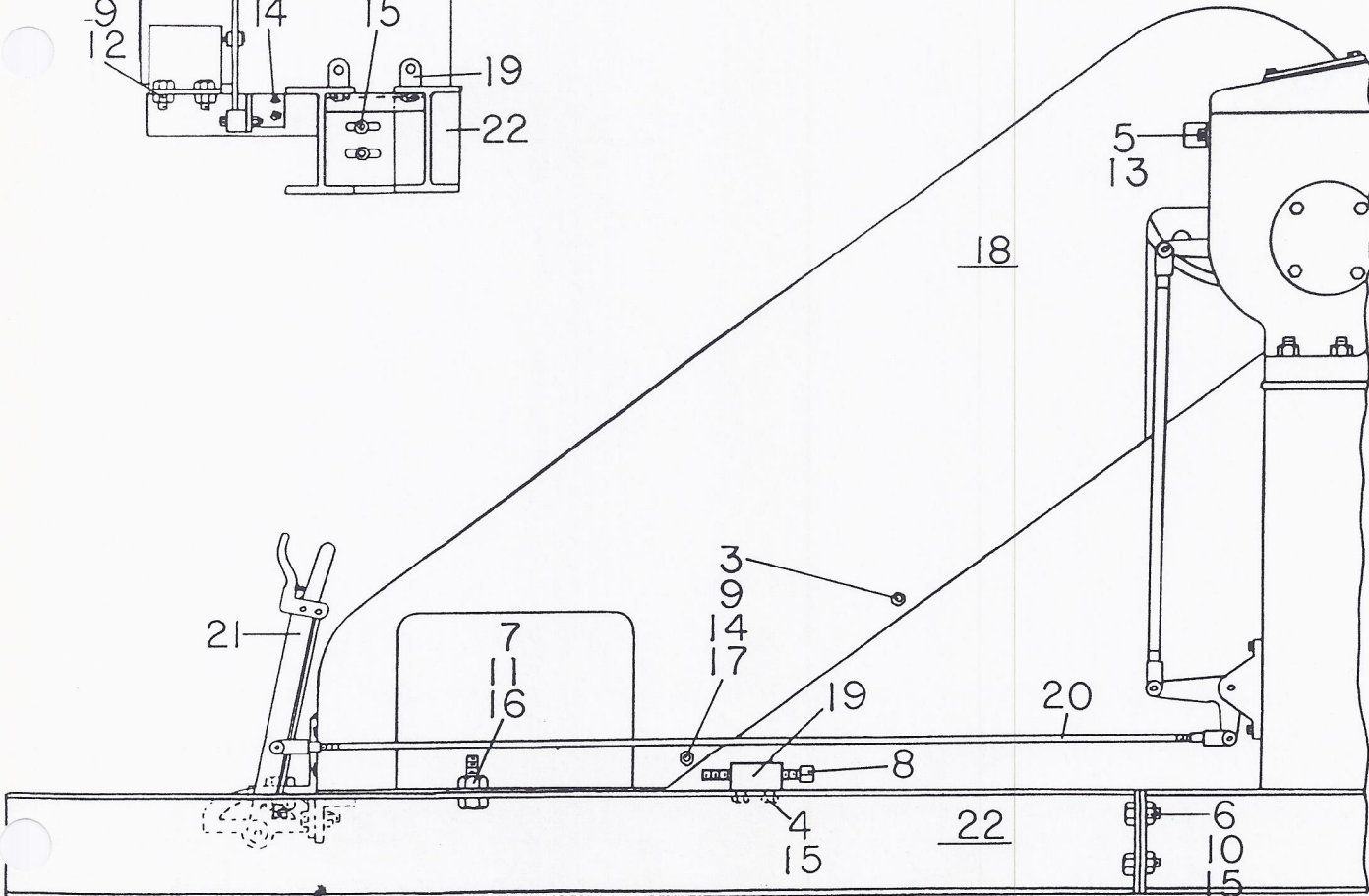




Drive Assy No. 38-1H Type 10" Ajax Drive



ADJUSTING SCREW ASSEMBLY FOR AJAX OR OTHER ENGINES.





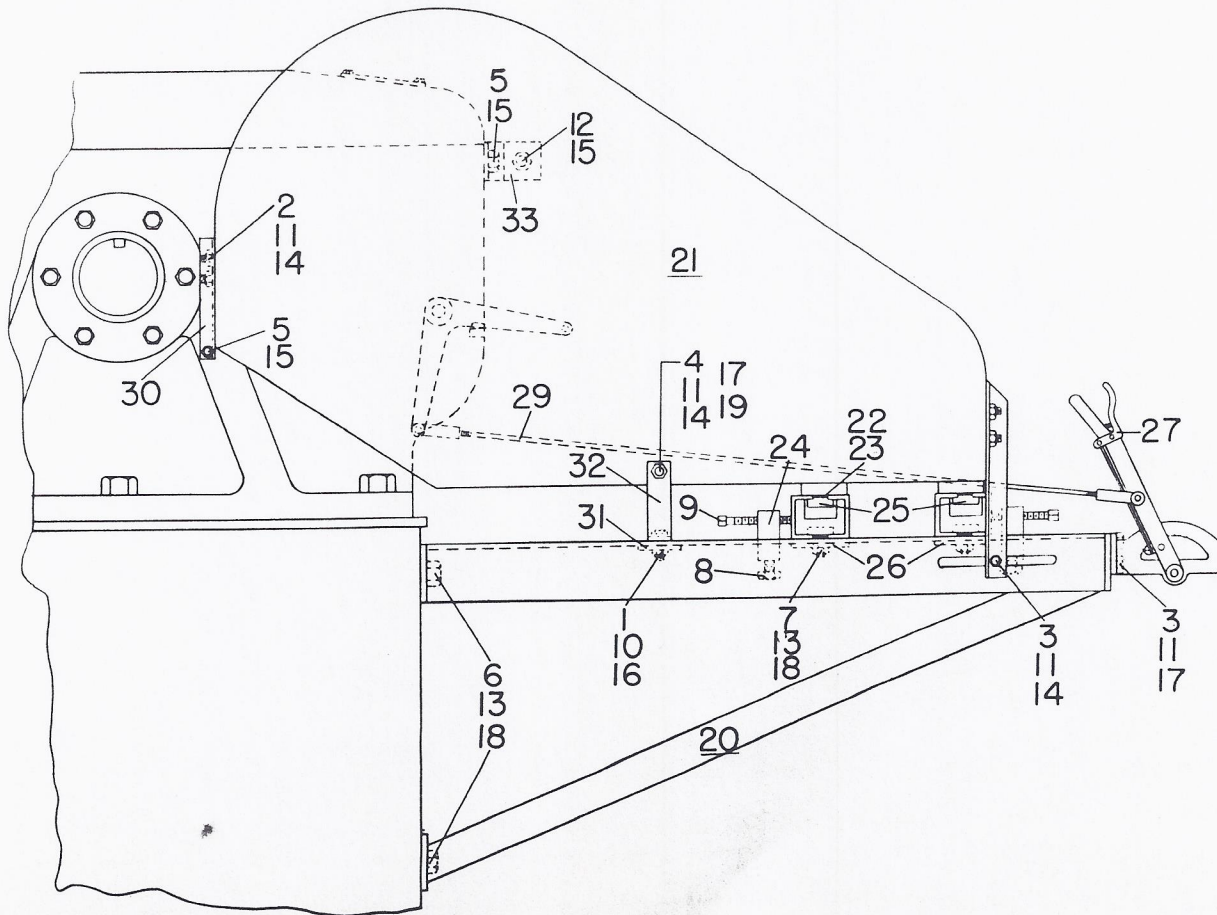
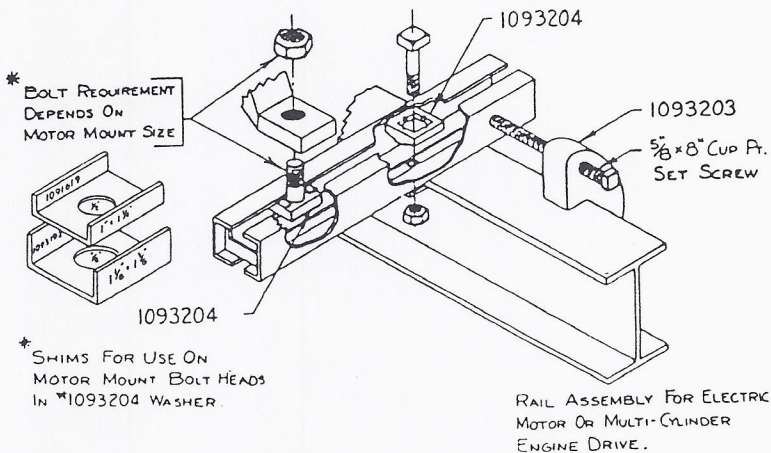
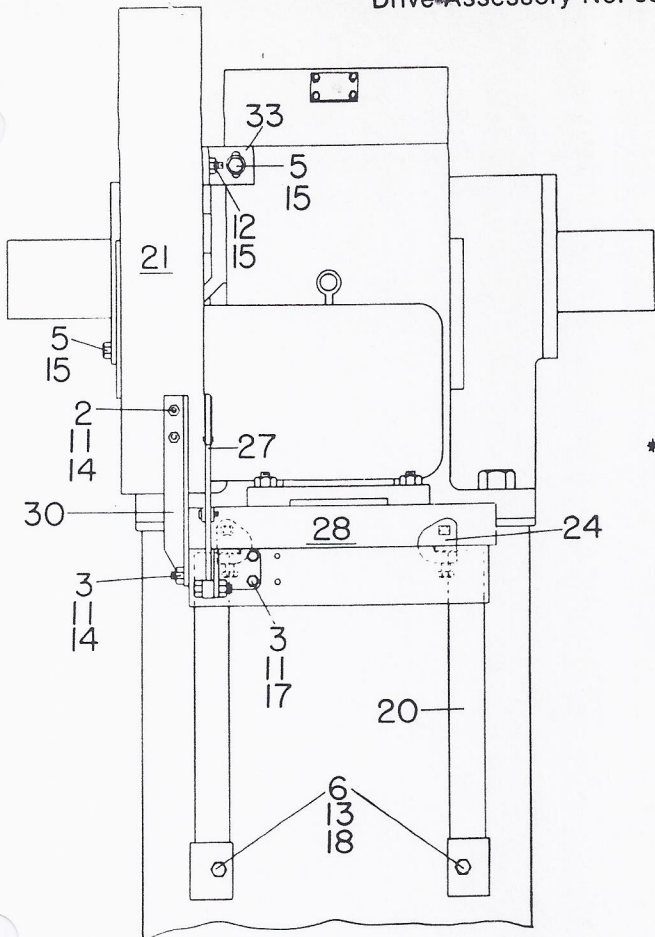
## PUMPING UNIT DRIVE ACCESSORIES

## Shipped Separate Parts List

Pumping Unit Size F228-246C-86 or F228-213C-100Drive Accessory No. 38-2A Type High Drive

ITEM NO.	QUANTITY	PART NUMBER	DESCRIPTION
1	1	7000210-11	3/8"x1½" Cap Screw
2	4	7000303-11	½"x1" Cap Screw
3	3	7000305-11	½"x1½" Cap Screw
4	1	5501331	½"x8½" Cap Screw
5	2	7000394-11	5/8"x1½" Cap Screw
6	5	7000482-10	7/8"x2½" Cap Screw
7	4	5500354	7/8"x2½" Cap Screw - Square Head
8	2	7016399	5/8"x2½" Square Head Set Screw
9	2	7016421	5/8"x8" Square Head Set Screw
10	1	6300060	3/8" Hex Nut
11	8	6300081	½" Hex Nut
12	1	6300103	5/8" Hex Nut
13	9	6300149	7/8" Hex Nut
14	7	7621034	½" Flat Washer
15	3	7621042	5/8" Flat Washer
16	1	7619041	3/8" Spring Lock Washer
17	3	7619050	½" Spring Lock Washer
18	9	7619074	7/8" Spring Lock Washer
19	1		½" Pipe - 7-1/8" Long
20	1	1037078	High Drive Platform
21	1	1038104	Belt Guard
22	4	1091619	Shim for Motor Bolt Head
23	4	1093192	Shim for Motor Bolt Head
24	2	1093203	Rail Adj. Screw Body
25	8	1093204	Rail Bolt Washer
26	4	1093213	Rail Clamp - 2½"x3-3/4"
27	1	1093293	Brake Lever - 24" Long
28	2	1093294	Motor Rail - 27" Long
29	1	1093333	Reach Rod - 5/8"x54" Long
30	2	1093361	Belt Guard Angle - 14" Long
31	1	1093362	Rail Clamp - 2"x3"
32	1	1093363	Belt Guard Middle Bracket
33	1	1093368	Belt Guard Bracket - 2½" Long

Drive Accessory No. 38-2A Type High Drive



PUMPING UNIT DRIVE ACCESSORIES

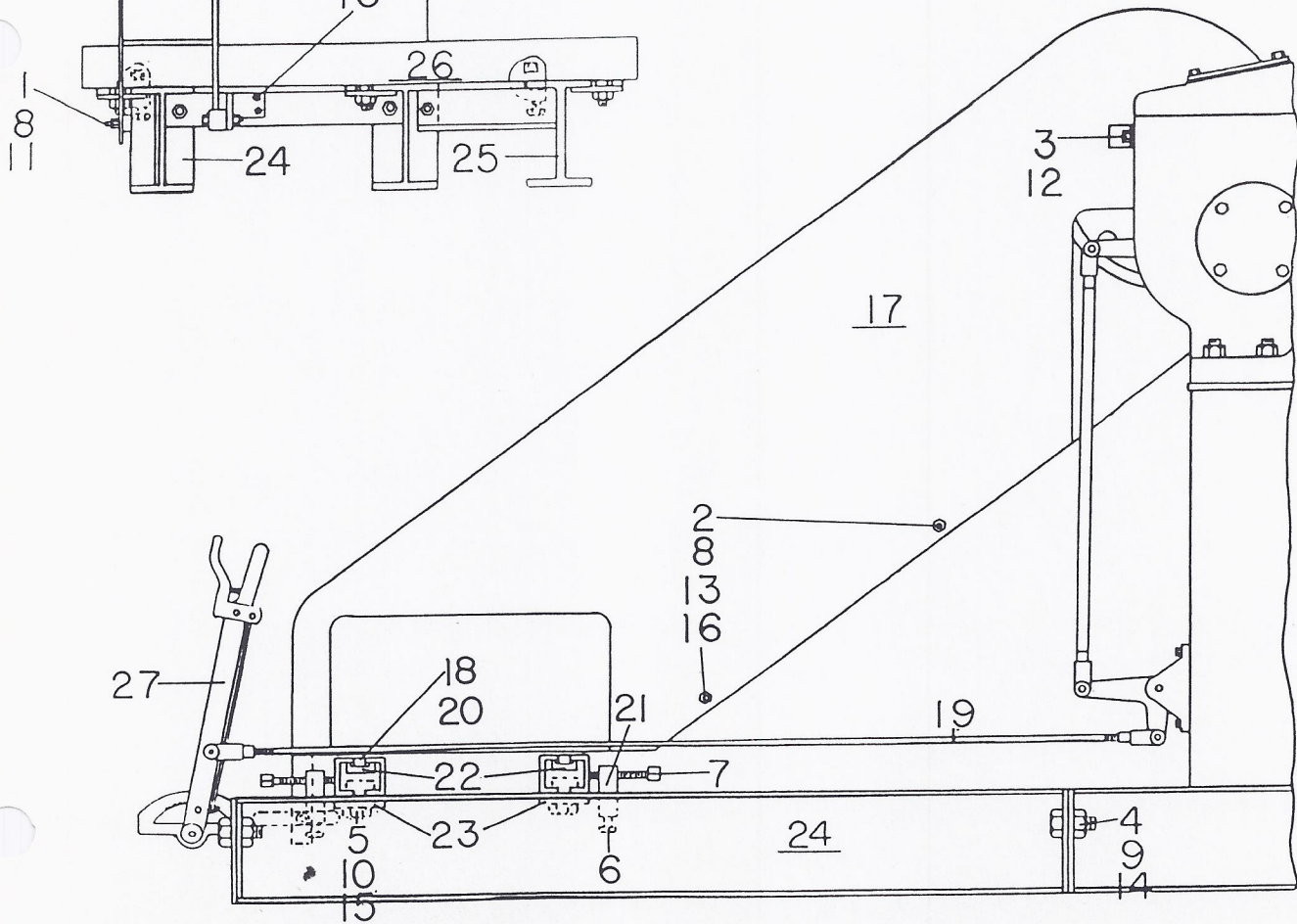
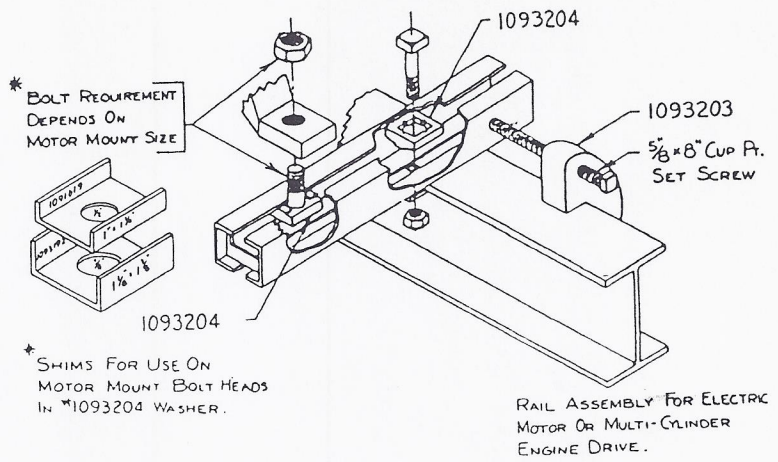
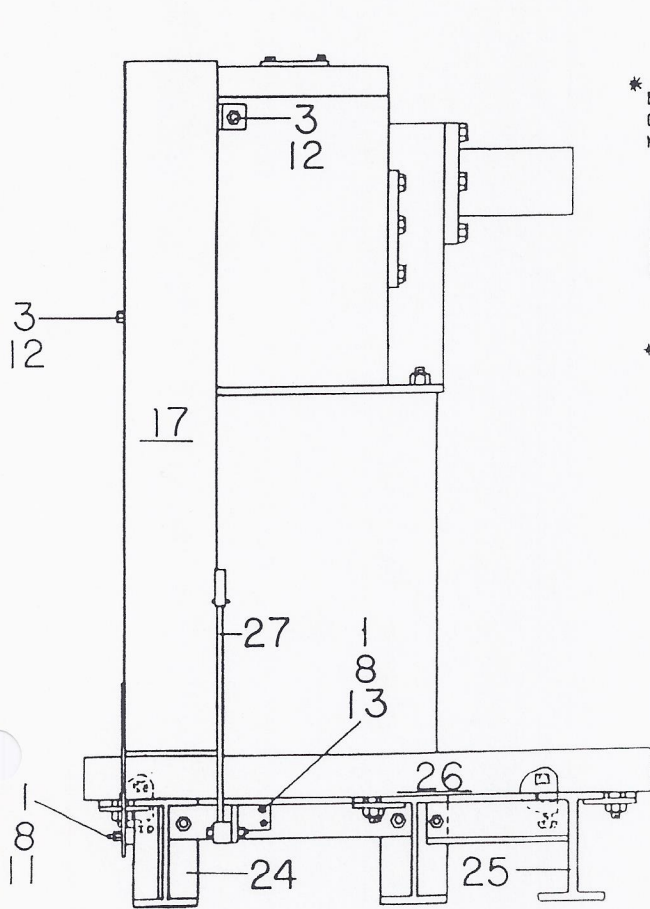
Shipped Separate Parts List

Pumping Unit Size F228-246C-86 or F228-213C-100

Drive Accessory No. 39-1C Type High Speed Engine

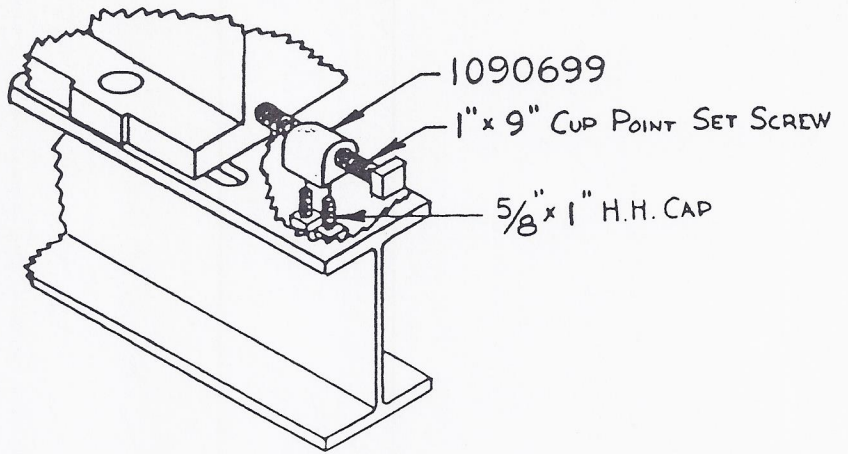
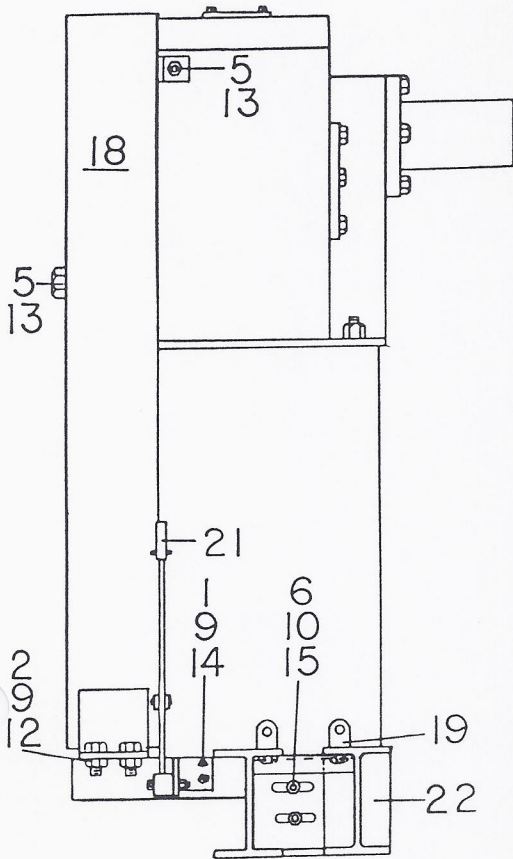
ITEM NO.	QUANTITY	PART NUMBER	DESCRIPTION
1	3	7000305-11	$\frac{1}{2}$ "x $1\frac{1}{2}$ " Cap Screw
2	2	5501331	$\frac{1}{2}$ "x $8\frac{1}{2}$ " Cap Screw
3	2	7000394-11	$\frac{5}{8}$ "x $1\frac{1}{4}$ " Cap Screw
4	4	7000397-11	$\frac{5}{8}$ "x2" Cap Screw
5	6	5500354	$\frac{7}{8}$ "x $2\frac{1}{2}$ " Cap Screw - Square Head
6	2	7016399	$\frac{5}{8}$ "x $2\frac{1}{2}$ " Square Head Set Screw
7	2	7016421	$\frac{5}{8}$ "x8" Square Head Set Screw
8	5	6300081	$\frac{1}{2}$ " Hex Nut
9	4	6300103	$\frac{5}{8}$ " Hex Nut
10	6	6300149	$\frac{7}{8}$ " Hex Nut
11	2	7621034	$\frac{1}{2}$ " Flat Washer
12	2	7621042	$\frac{5}{8}$ " Flat Washer
13	4	7619050	$\frac{1}{2}$ " Spring Lock Washer
14	4	7619058	$\frac{5}{8}$ " Spring Lock Washer
15	6	7619074	$\frac{7}{8}$ " Spring Lock Washer
16	2		$\frac{1}{2}$ " Pipe - $7\frac{1}{2}$ " Long
17	1	1039101	Belt Guard
18	4	1091619	Shim for Motor Bolt Head
19	1	1092979	Reach Rod - $\frac{5}{8}$ "x8'9"
20	4	1093192	Shim for Motor Bolt Head
21	2	1093203	Rail Adj. Screw Body
22	10	1093204	Rail Bolt Washer
23	6	1093205	Rail Clamp - $2\frac{1}{2}$ "x $3\frac{3}{4}$ "
24	1	1093246	Extension Base
25	1	1093247	Outrigger for Base
26	2	1093282	Motor Rail - 63" Long
27	1	1093293	Brake Lever - 24" Long
			* Bellcrank installed on unit

Drive Assy No. 39-1C Type High Speed Engine

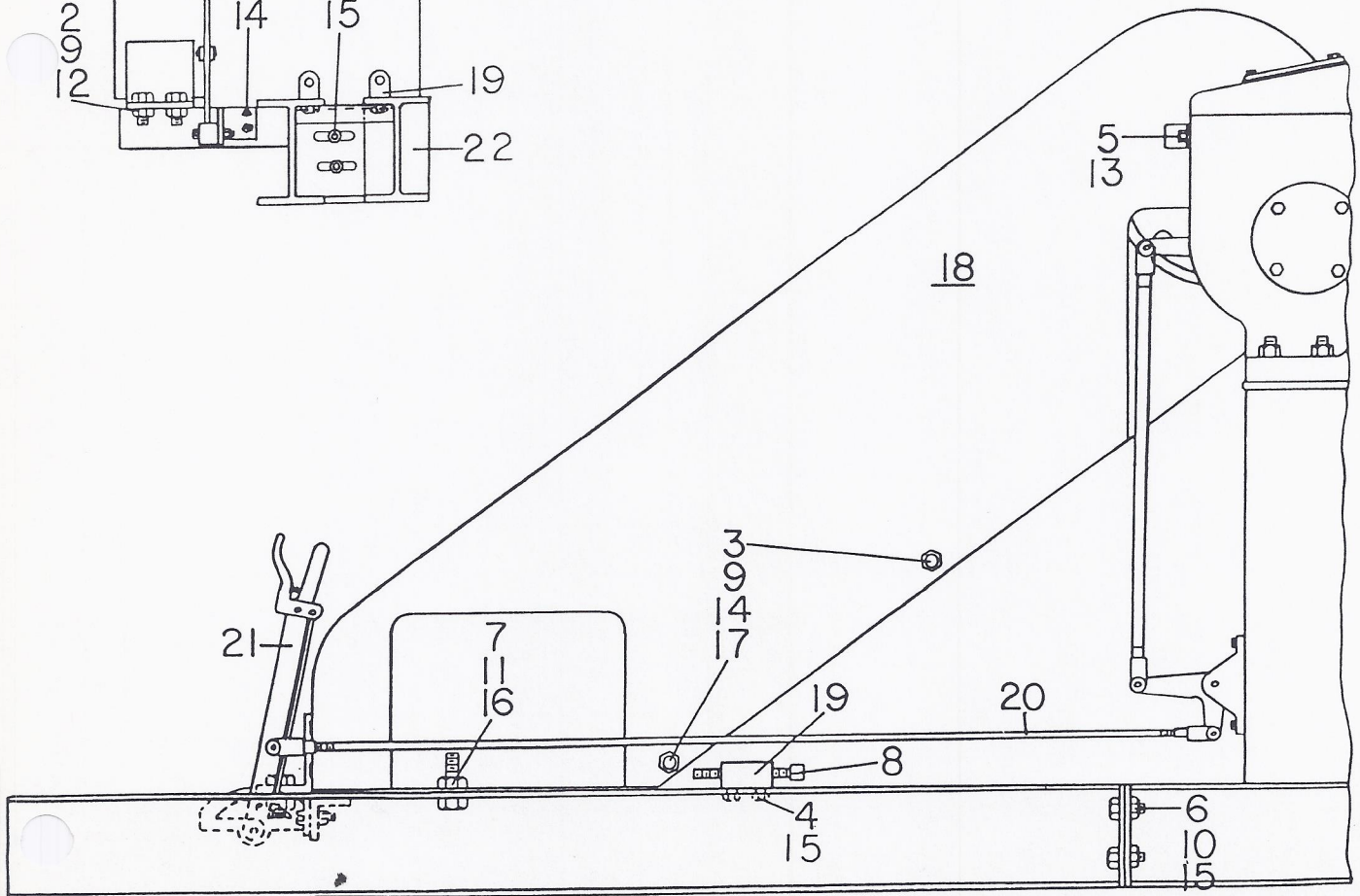




Drive Assy No. 39-1E Type 8" Ajax Drive

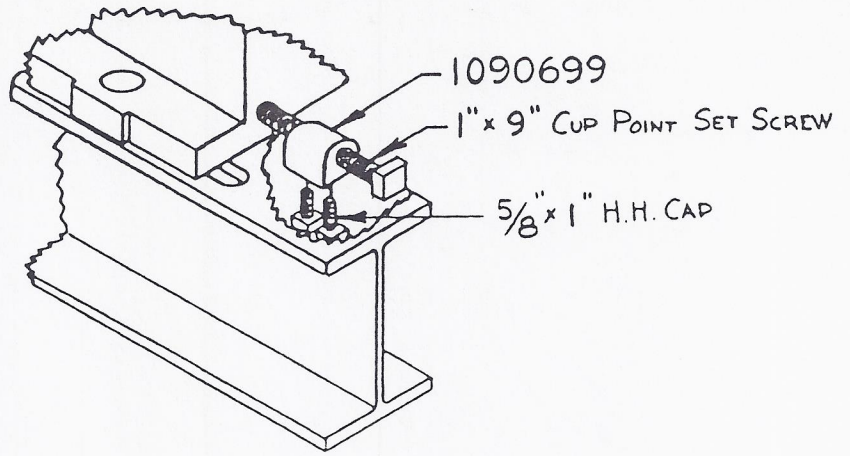
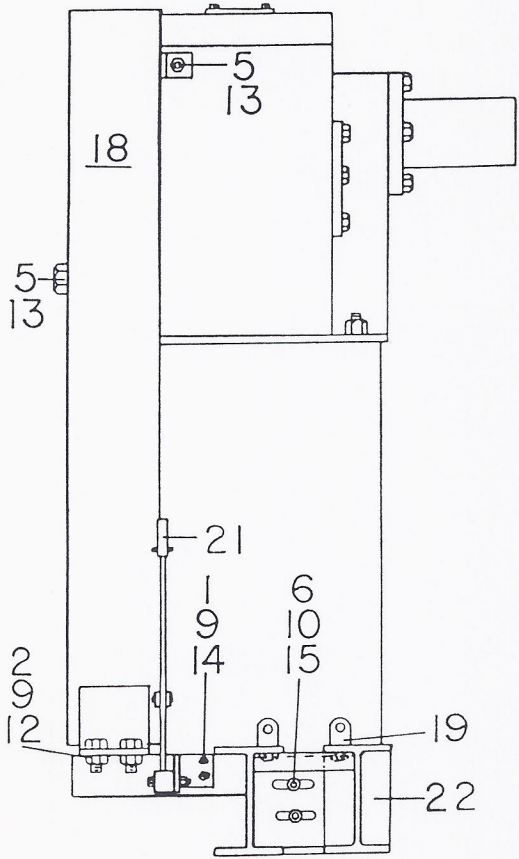


ADJUSTING SCREW ASSEMBLY  
FOR AJAX OR OTHER ENGINES.

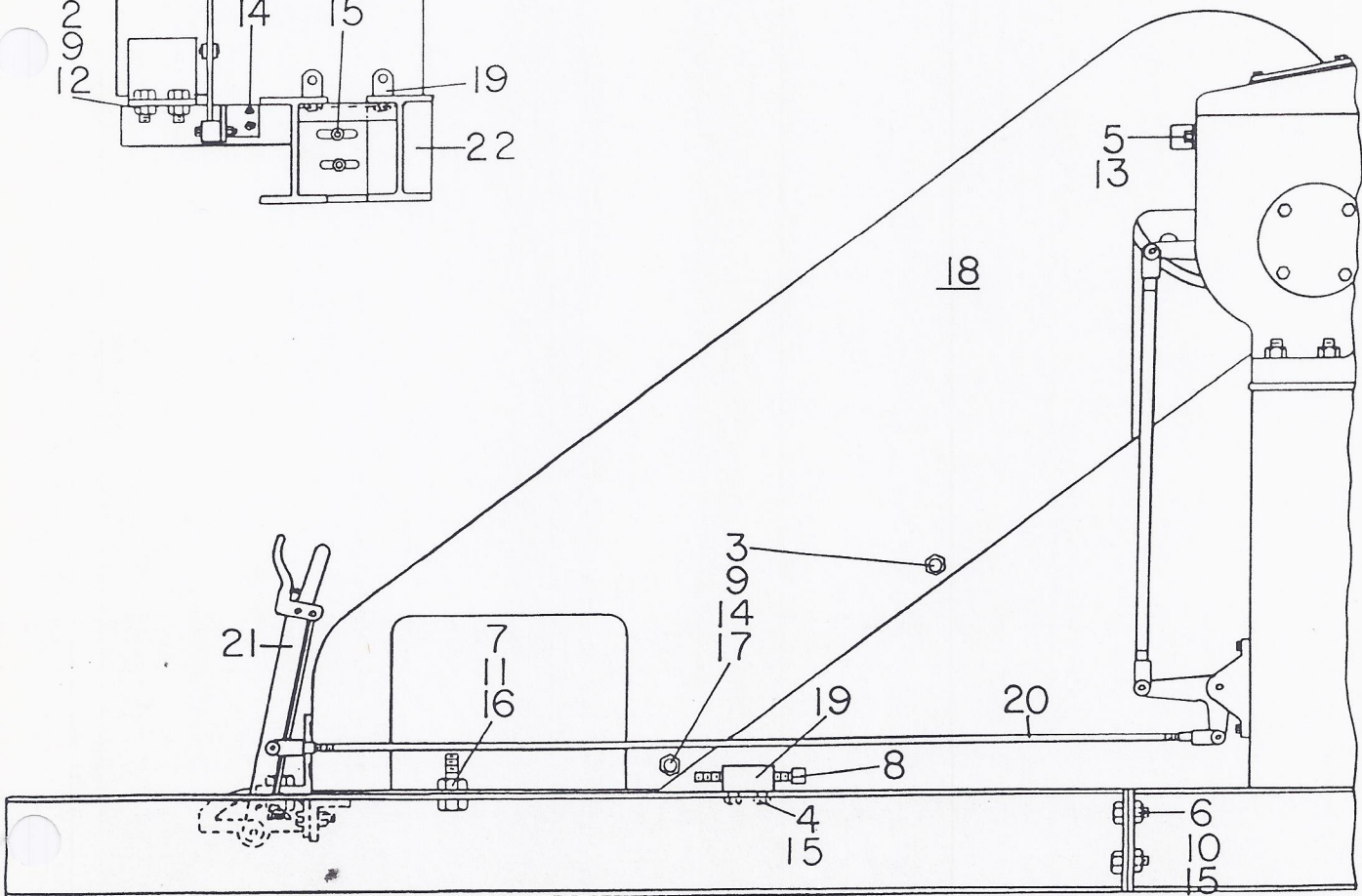




Drive Assy No. 39-1D Type 10" Ajax Drive



ADJUSTING SCREW ASSEMBLY  
FOR AJAX OR OTHER ENGINES.



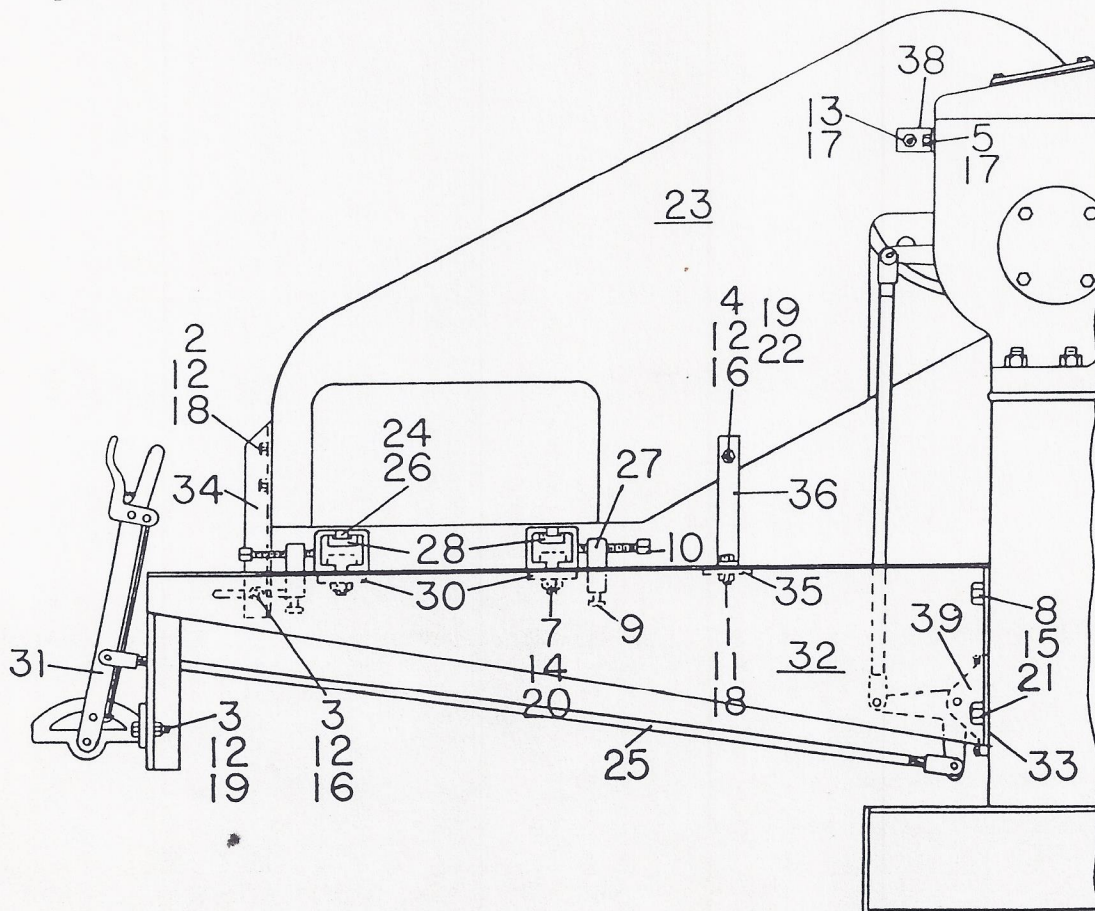
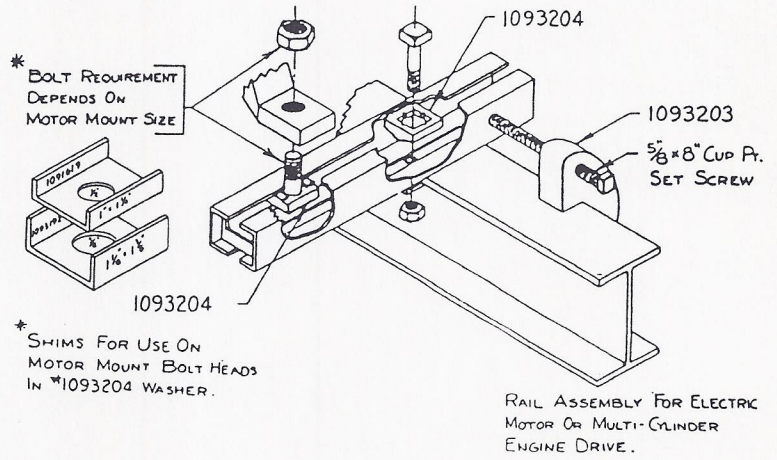
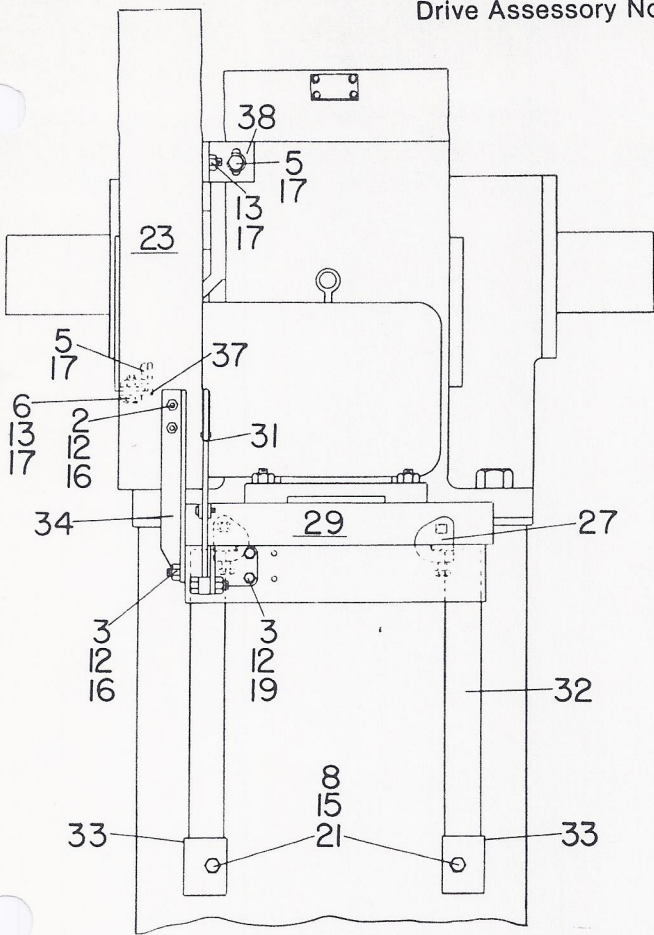


PUMPING UNIT DRIVE ACCESSORIES  
Shipped Separate Parts List

Pumping Unit Size F320-305C-100 or F320-256C-120  
Drive Accessory No. 40-1A Type High Drive

Item No.	Quantity	Part Number	Description
1	1	7000210-11	3/8"x1 1/2" Cap Screw
2	2	7000303-11	1/2"x1" Cap Screw
3	3	7000305-11	1/2"x1 1/2" Cap Screw
4	1	7000342-11	1/2"x1 1/2" Cap Screw
5	2	7000394-11	5/8"x1 1/4" Cap Screw
6	1	7000395-11	5/8"x1 1/2" Cap Screw
7	4	5500355	7/8"x2-3/4" Cap Screw-Square Head
8	5	7000524-10	1"x2 1/2" Cap Screw
9	2	7016399	5/8"x2 1/2" Square Head Set Screw
10	2	7016421	5/8"x8" Square Head Set Screw
11	1	6300060	3/8" Hex Nut
12	6	6300081	1/2" Hex Nut
13	2	6300103	5/8" Hex Nut
14	4	6300149	7/8" Hex Nut
15	5	6300160	1" Hex Nut
16	5	7621034	1/2" Flat Washer
17	3	7621042	5/8" Flat Washer
18	1	7619041	3/8" Spring Lock Washer
19	3	7619050	1/2" Spring Lock Washer
20	4	7619074	7/8" Spring Lock Washer
21	5	7619081	1" Spring Lock Washer
22	1		1/2" Pipe - 9-3/4" Long
23	1	1040102	Belt Guard
24	4	1091619	Shim for Motor Bolt Head
25	1	1091239	Reach Rod - 5/8"x7'6" Long
26	4	1093192	Shim for Motor Bolt Head
27	2	1093203	Rail Adj. Screw Body
28	8	1093204	Rail Bolt Washer
29	2	1093211	Motor Rail - 33" Long
30	4	1093213	Rail Clamp - 2 1/2"x3-3/4"
31	1	1093293	Brake Lever - 24" Long
32	1	1093339	High Drive Platform
33	7	1093352	Shims - Hi-Drive Platform to Dog-house
34	1	1093361	Belt Guard Angle - 14" Long
35	1	1093362	Rail Clamp - 2"x3"
36	1	1093364	Belt Guard Center Bracket "L"
37	1	1093366	Belt Guard Bracket - 3 1/2" Angle
38	1	1093368	Belt Guard Bracket - 2 1/2" Angle * Bellcrank installed on unit

Drive Assy No. 40-1A Type High Drive



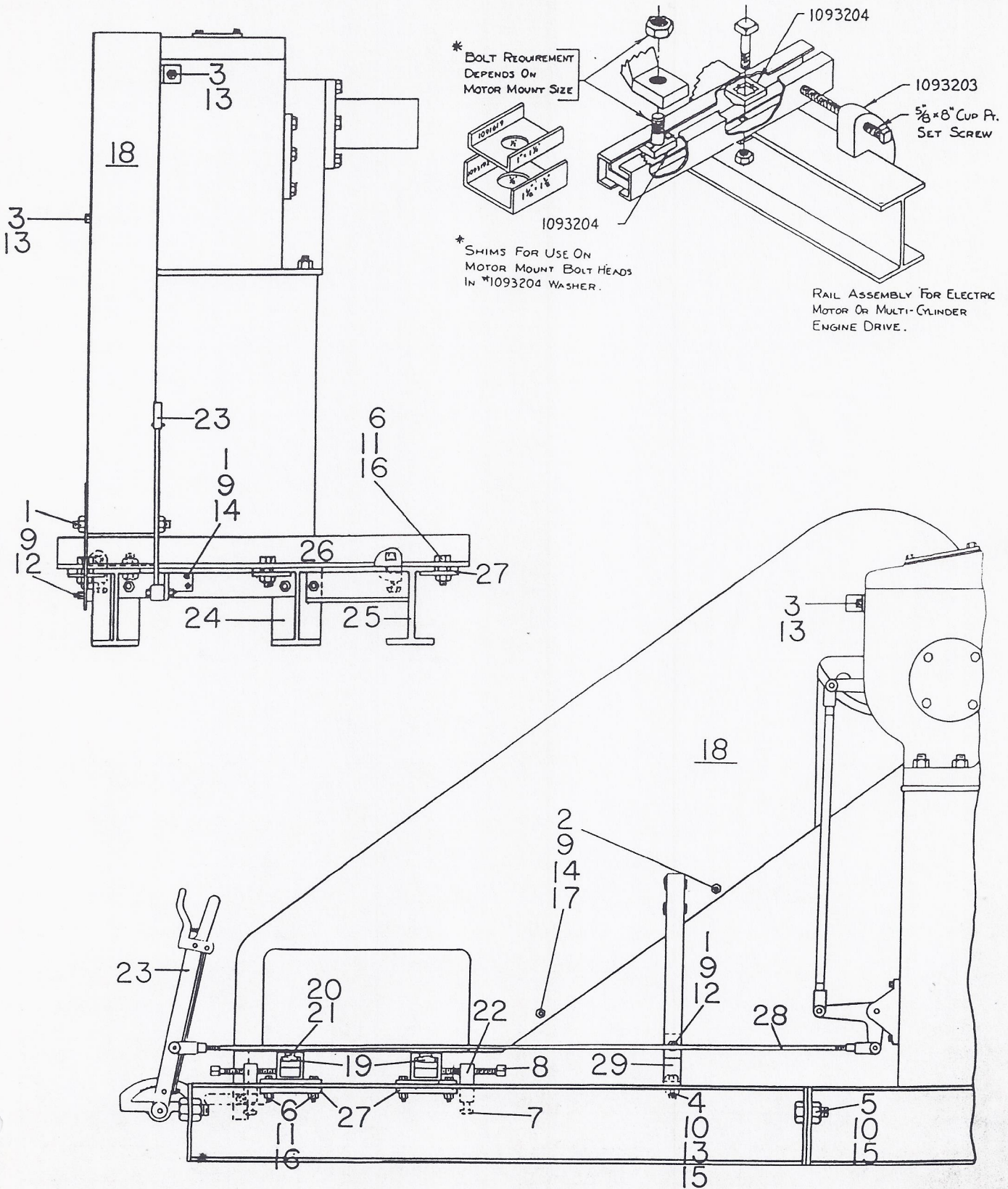
## PUMPING UNIT DRIVE ACCESSORIES

## Shipped Separate Parts List

Pumping Unit Size F320-305C-100 or F320-256C-120Drive Accessory No. 40-1C Type High Speed Engine

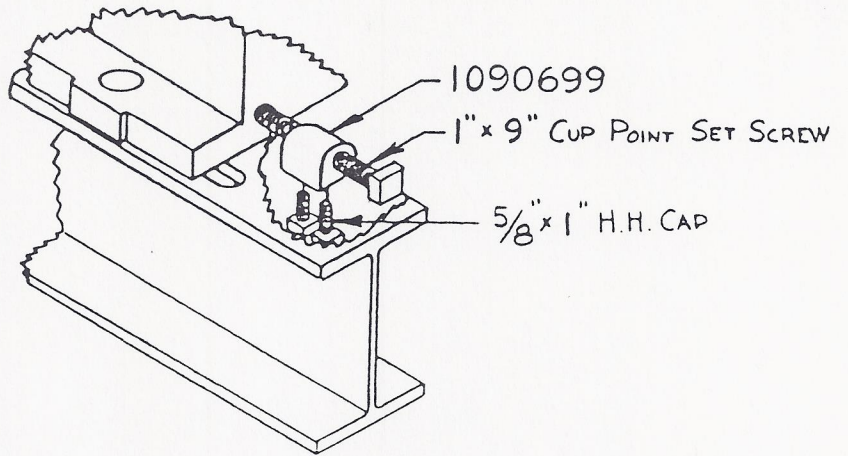
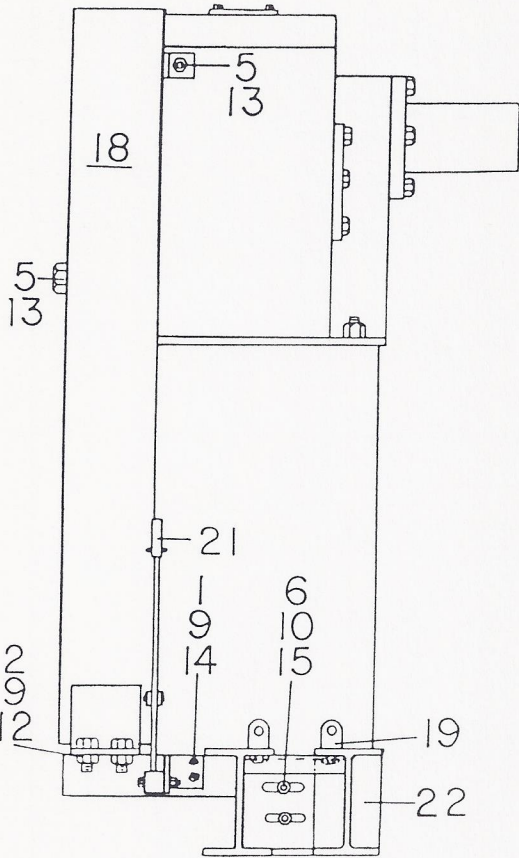
ITEM NO.	QUANTITY	PART NUMBER	DESCRIPTION
1	5	7000305-11	½"x1½" Cap Screw
2	2	7000342-11	½"x1" Cap Screw
3	2	7000394-11	5/8"x1¼" Cap Screw
4	1	7000396-11	5/8"x1-3/4" Cap Screw
5	4	7000397-11	5/8"x2" Cap Screw
6	12	7000443-11	3/4"x2-3/4" Cap Screw
7	2	7016399	5/8"x2½" Square Head Set Screw
8	2	7016421	5/8"x8" Square Head Set Screw
9	7	6300081	½" Hex Nut
10	7	6300103	5/8" Hex Nut
11	12	6300121	3/4" Hex Nut
12	5	7621034	½" Flat Washer
13	4	7621042	5/8" Flat Washer
14	4	7619050	½" Spring Lock Washer
15	7	7619058	5/8" Spring Lock Washer
16	12	7619066	3/4" Spring Lock Washer
17	2		½" Pipe - 10" Long
18	1	1040101	Belt Guard - 34" Sheave
18	1	1040160	Belt Guard - 48" Sheave (Optional)
19	4	1090589	Rail Bolt Washer
20	4	1091619	Shim for Motor Bolt Head
21	4	1093192	Shim for Motor Bolt Head
22	2	1093203	Rail Adj. Screw Body
23	1	1093293	Brake Lever - 24" Long
24	1	1093334	Extension Base
25	1	1093335	Outrigger for Base
26	2	1093336	Motor Rail - 6'6" Long
27	6	1093340	Rail Clamp - 4"x9"
28	1	1093341	Reach Rod - 5/8"x12'
29	1	1093342	Belt Guard Center Bracket
			* Bellcrank installed on unit

Drive Assy No. 40-1C Type High Speed Engine

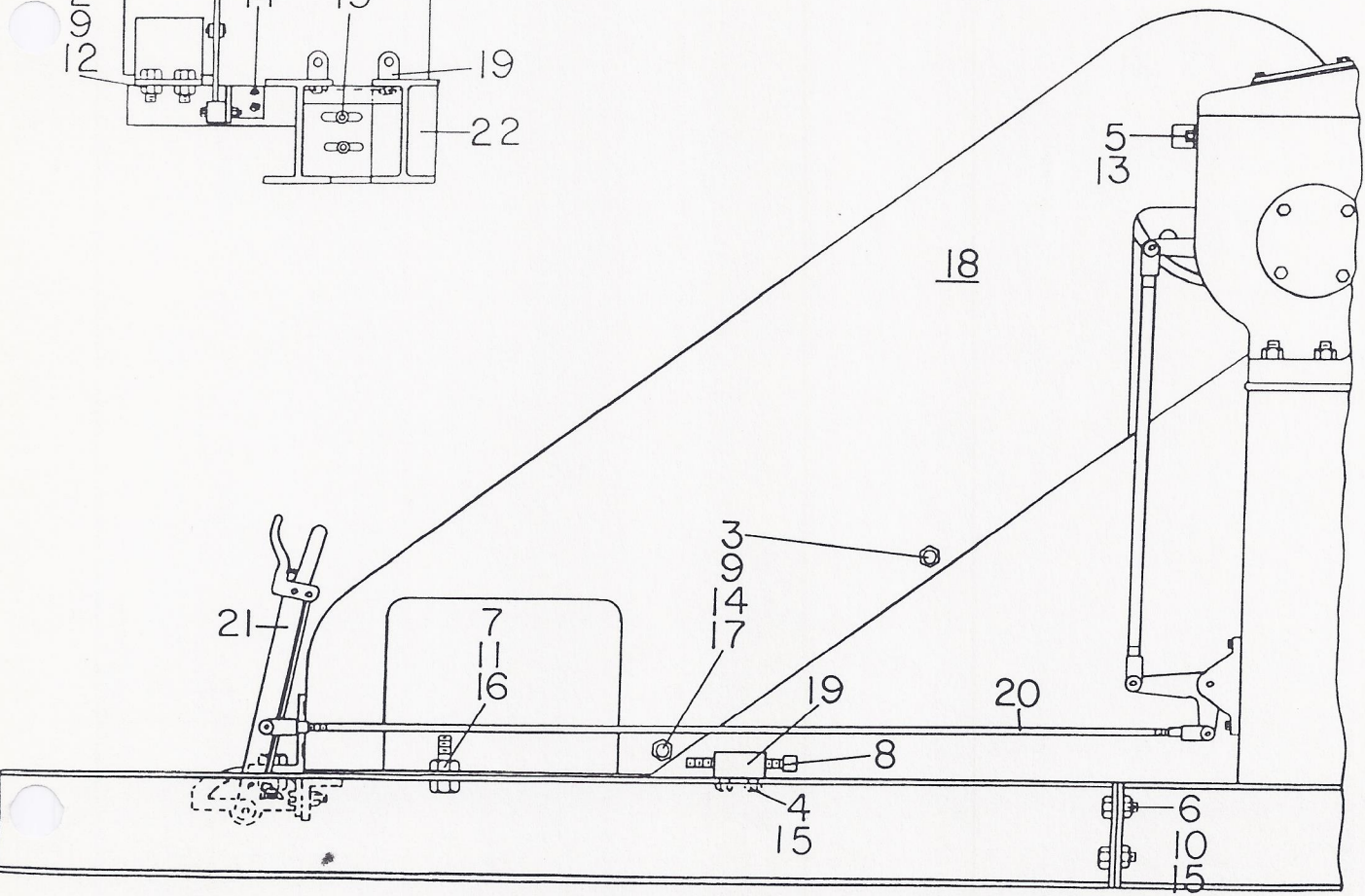




Drive Assy No. 40-1G Type 8" Ajax Drive

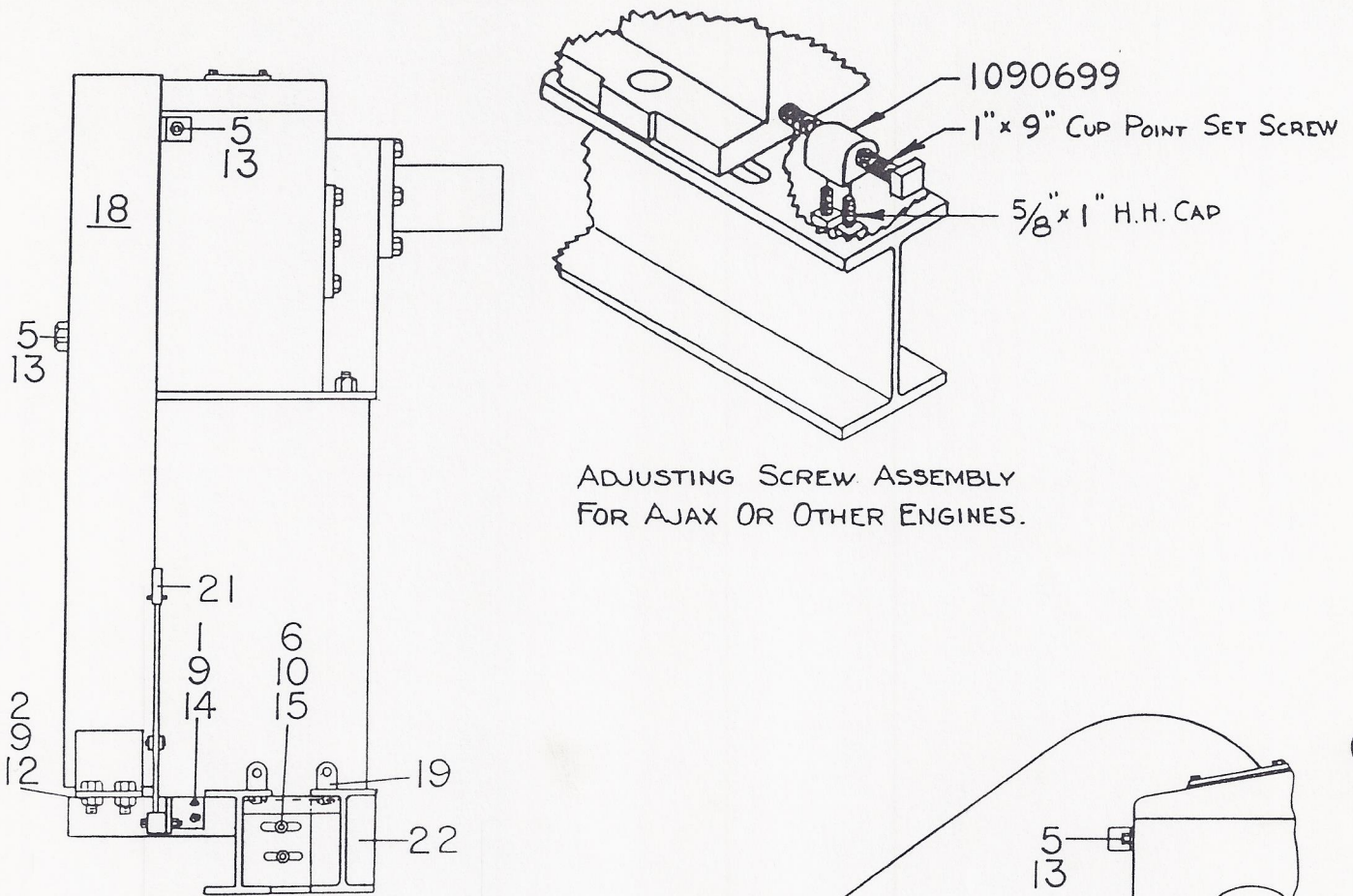


ADJUSTING SCREW ASSEMBLY  
FOR AJAX OR OTHER ENGINES.





Drive Assy No. 40-1D Type 10" Ajax Drive



ADJUSTING SCREW ASSEMBLY  
FOR AJAX OR OTHER ENGINES.

