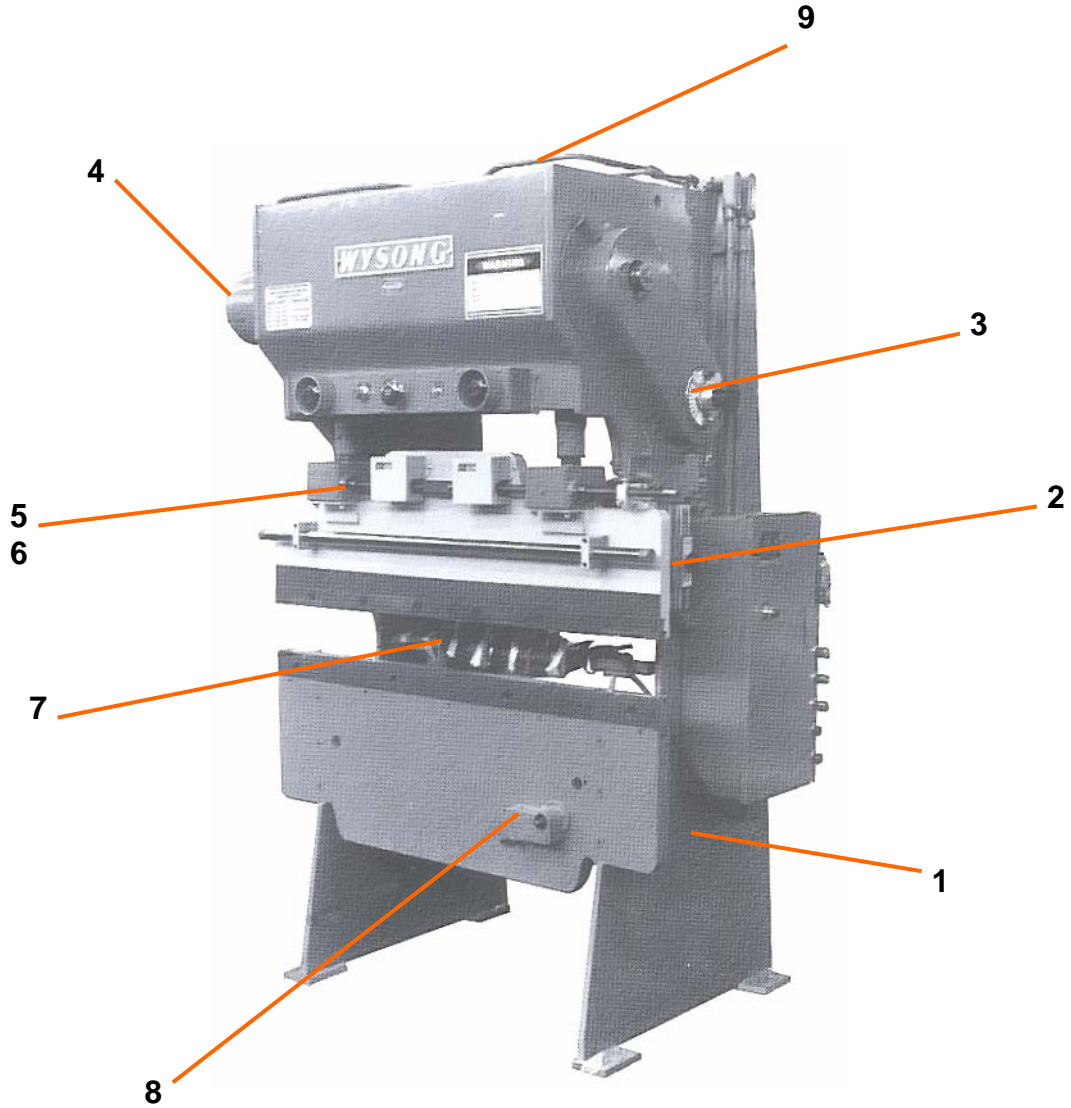


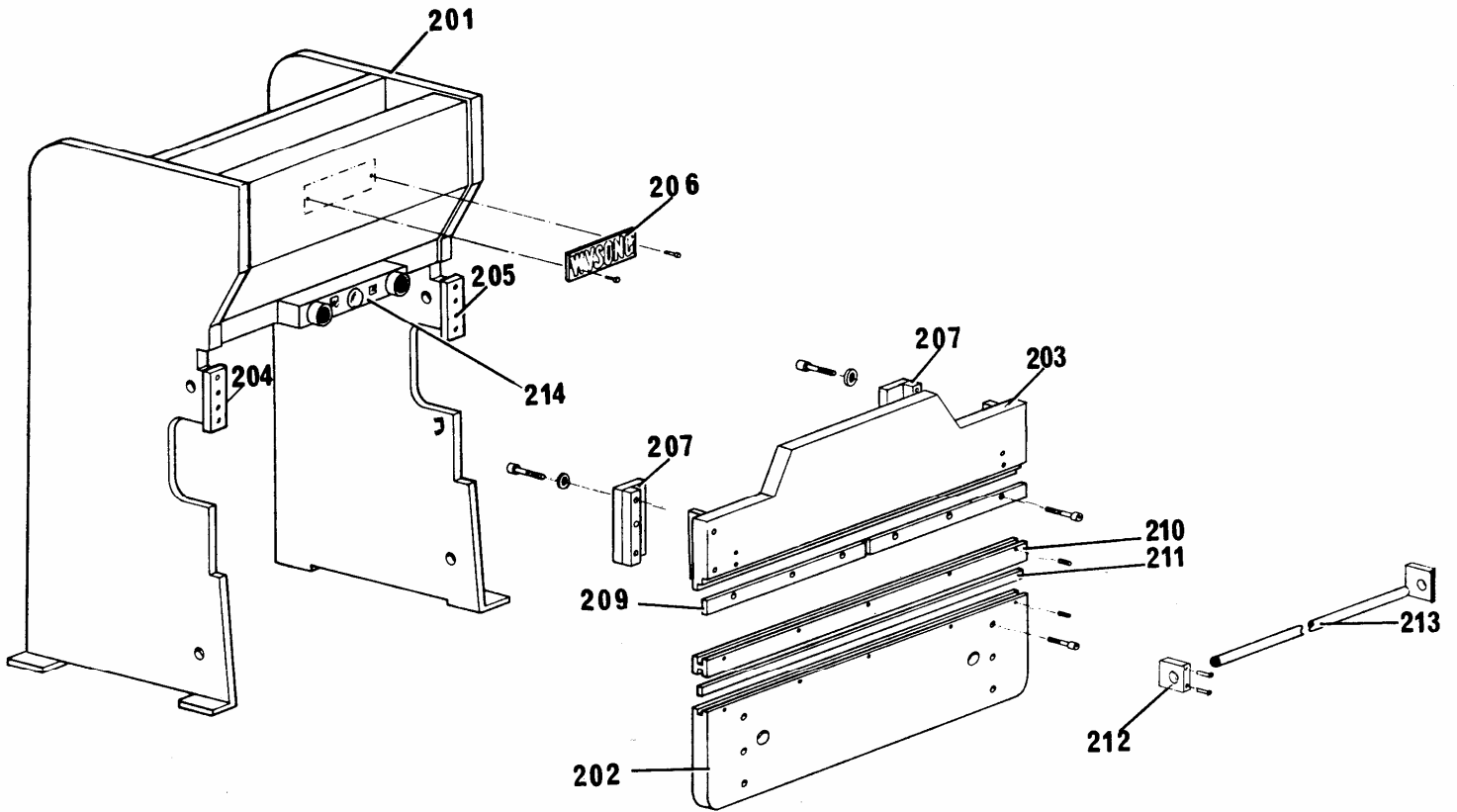
# H-20 TON HYDRA-MECHANICAL PRESS BRAKE



## NOMENCLATURE

FIGURE	DESCRIPTION	PAGE
1	Frame Assembly .....	2
2	Hi-Lo Cycle Adjustment .....	3
3	Stroke Length Adjustment .....	3
4	Drive Assembly .....	4
5	Standard Ram Elevation .....	5
6	Optional Power Ram Elevation .....	6
7	Standard Back Gauge .....	7
8	Front Operated Back Gauge .....	8, 9
9	Hydraulic Group .....	10, 11

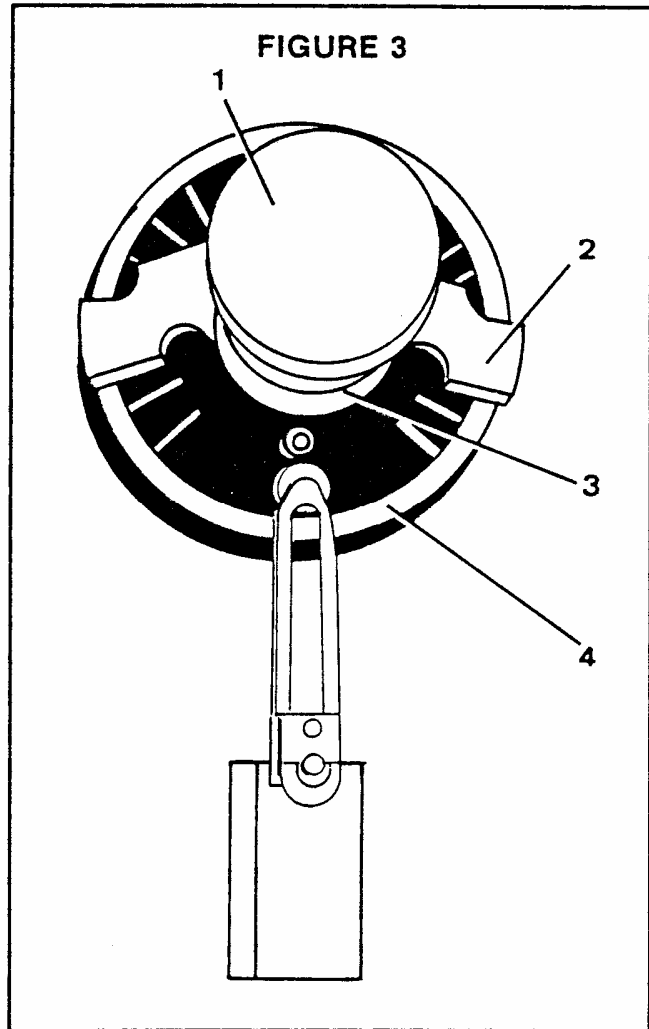
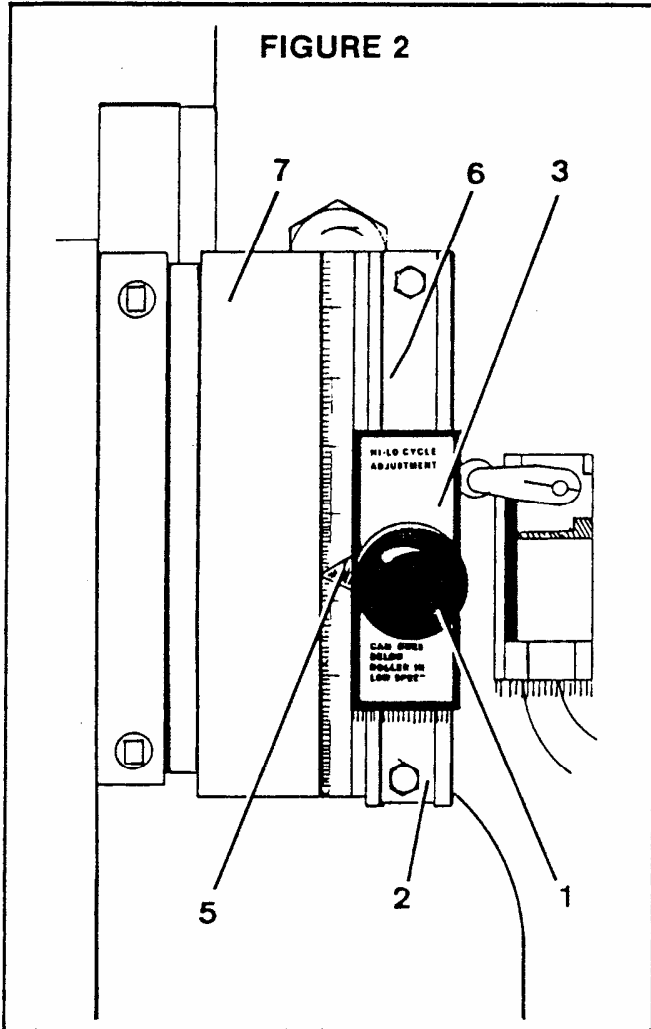
**Page 2**  
**FRAME ASSEMBLY**



**FIGURE 1 — FRAME ASSEMBLY**

ITEM	QUANTITY	DESCRIPTION	PART NUMBER
201	1	Frame Weldment Model H-2052 .....	7235-275
		Model H-2072 .....	7235-275
202	1	Bed Model H-2052 .....	7435-329
		Model H-2072 .....	7435-327
203	1	Ram Model H-2052 .....	7235-185
		Model H-2072 .....	7235-274
204	1	Way, Ram Left	7335-065
205	1	Way, Ram Right	7335-067
206	1	Nameplate Wysong	2205-286
207	2	Gibs	7435-655
209	1	Clamping Bar Model H-2052 .....	L-7435-330
	1	Model H-2052 .....	R-7435-331
	3	Model H-2072 .....	7135-029
210	1	Die Holder Model H-2052 .....	7435-333
	1	Model H-2072 .....	7135-094
211		Key, Die Holder Model H-2052 .....	7435-395
		Model H-2072 .....	7485-084
212	2	Bracket, Handrail Model H-2052 .....	7486-315
	2	Model H-2072 .....	7486-315
213	1	Handrail Model H-2052 .....	3859-203
	1	Model H-2072 .....	3859-206
214	1	Dual Palm Control Station (Standard)	4194-200-CH
		Dual Palm Control Station (Optional Ram ELEV.)	4194-150-CH

Page 3  
**HI-LO CYCLE & STROKE LENGTH ADJUST**



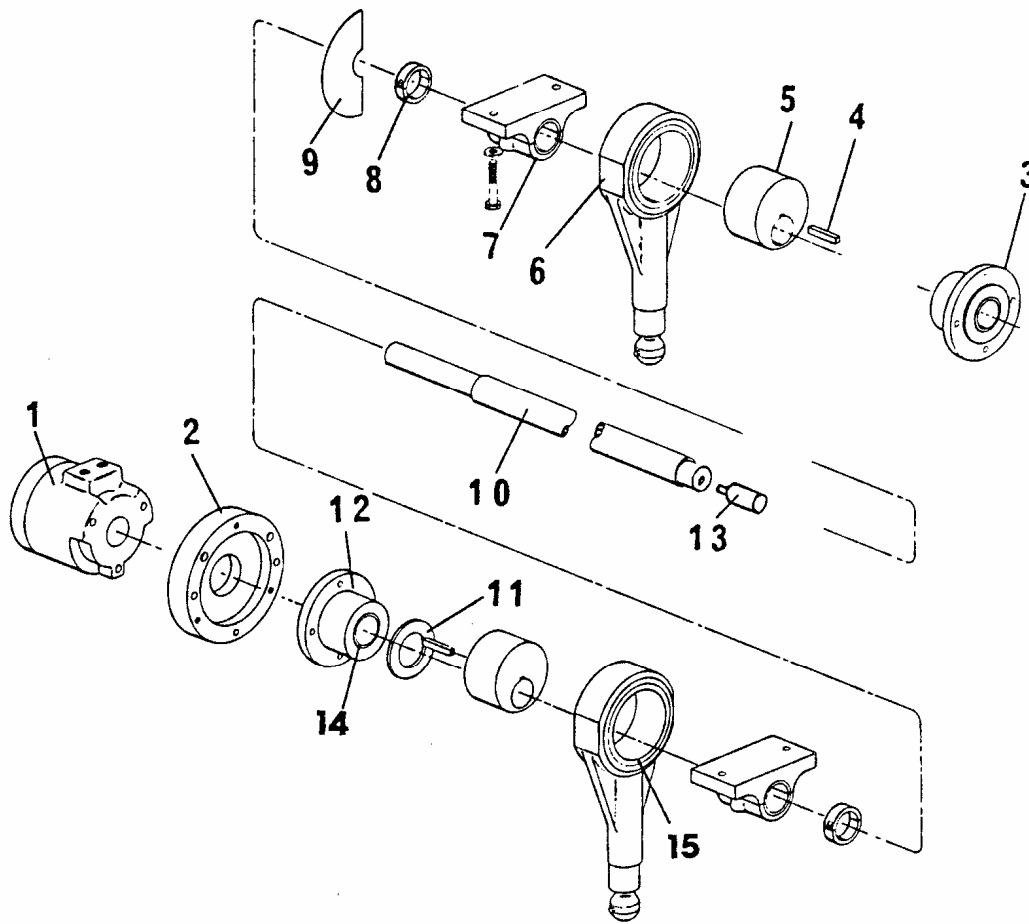
**FIGURE 2 — HI-LO CYCLE ADJUSTMENT**

ITEM	QUANTITY	DESCRIPTION	PART NUMBER
1	1	Knob .....	2203-008
2	1	Limit Trip Channel .....	7435-128
3	1	Limit Trip Plate .....	7435-748
4	1	Limit Trip Nut (not shown) .....	7485-309
5	1	Ram Adj. Pointer .....	7485-480
6	1	Ram Adj. Scale .....	7485-407
7	1	Angle Bracket .....	7235-175

**FIGURE 3 — STROKE LENGTH ADJUSTMENT**

ITEM	QUANTITY	DESCRIPTION	PART NUMBER
1	1	Knob .....	2203-016
2	2	Stroke Adj. Arm .....	7435-535
3	1	Stroke Adj. Cam Clamp .....	7435-660
4	1	Stroke Adj. Cam Hub .....	7435-664
5	1	Stroke Control Shaft (not shown) .....	7435-659

**Page 4**  
**DRIVE ASSEMBLY**



**DRIVE ASSEMBLY**

ITEM	QUANTITY	DESCRIPTION	PART NUMBER
1	1	HS-15 Hyd. Rotary Actuator .....	3746-030
2	1	Actuator Adapter .....	7035-182
3	1	Eccentric Shaft Bearing - R.H. ....	7035-180
4	2	Eccentric Key .....	7435-675
5	2	Pitman Eccentric .....	7435-419
6	2	Pitman .....	7035-148
7	2	Split Bearing .....	3136-298
8	2	Collar .....	3302-234
9	1	Proximity Switch Trip .....	7435-685
10	1	Eccentric Shaft .....	7435-752
11	1	Eccentric Bearing Spacer .....	7435-730
12	1	Eccentric Shaft Bearing - L.H. ....	7035-180
13	1	Stroke Control Shaft .....	7435-750
14	2	Bearing .....	3134-349
15	2	Pitman Bearing .....	3134-644

Page 5  
RAM ELEVATION

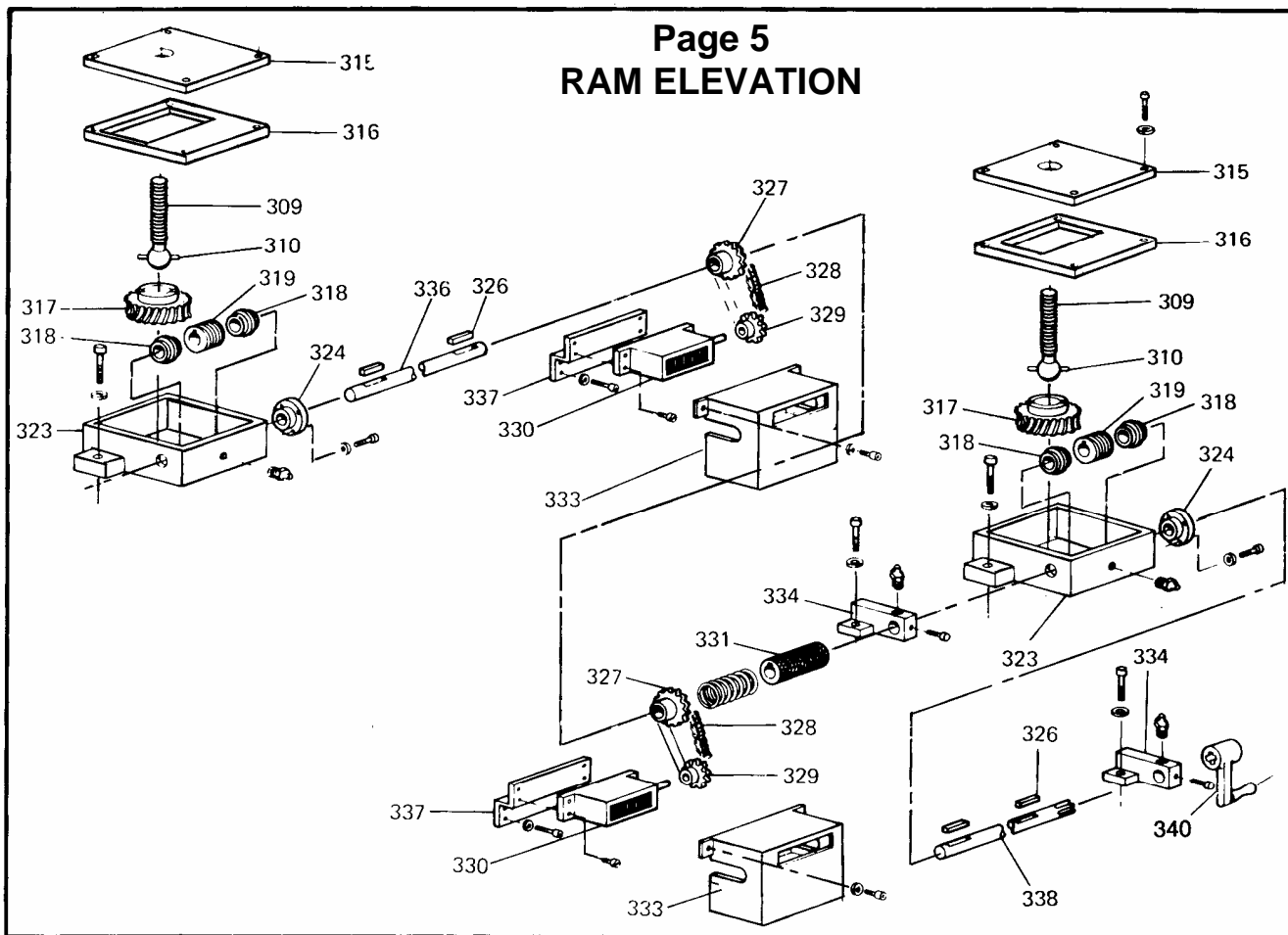


FIGURE 5 — RAM ELEVATION (HAND. STD.)

ITEM	QUANTITY	DESCRIPTION	PART NUMBER
309	2	Ram Adj. Screw	7435-257
310	2	Pin	7435-258
315	2	Cover, Housing	7035-113
316	ASN	Shim, Nut Retainer .003	3328-336
	ASN	Shim, Nut Retainer .005	3328-337
	ASN	Shim, Nut Retainer .0075	3328-338
	ASN	Shim, Nut Retainer .010	3328-339
	ASN	Shim, Nut Retainer	3328-340
317	2	Gear, Worm, Ram Adj.	3436-764
318	4	Bearing, Thrust Ball	3102-005
319	2	Worm	3436-201
323	2	Housing, Ram Adj.	7035-112
324	2	Cap. Housing Brg.	7035-019
326	2	Keys 3/16" Sq. x 3/4 Lg.	3301-421
	2	Keys 3/16" Sq. x 1 1/2 Lg.	3301-424
327	2	Sprocket, Elevation	7435-075
328	ASN	Chain -25	3430-030
329	2	Sprocket, Ram Adj.	7491-063
330	2	Counter	2201-240
331	1	Ram Adj. Coupling	7135-006
333	2	Cover Elevation Counter	7235-336
334	1	Bearing, Ram Adj. Lock	7035-004
	1	Bearing, Ram Adj. Shaft Lock	7035-066
336	1	Shaft, Left Manual Ram Adj.	7435-338
337	2	Bracket, Elevation Counter	7435-339
338	1	Shaft, Right Manual Ram Adj. (Model 2052)*	7435-337
339	1	Handle	2203-035
340	1	Crank	7035-185

\*Model 2072 — #7435-346

Page 6  
Power Ram Elevation

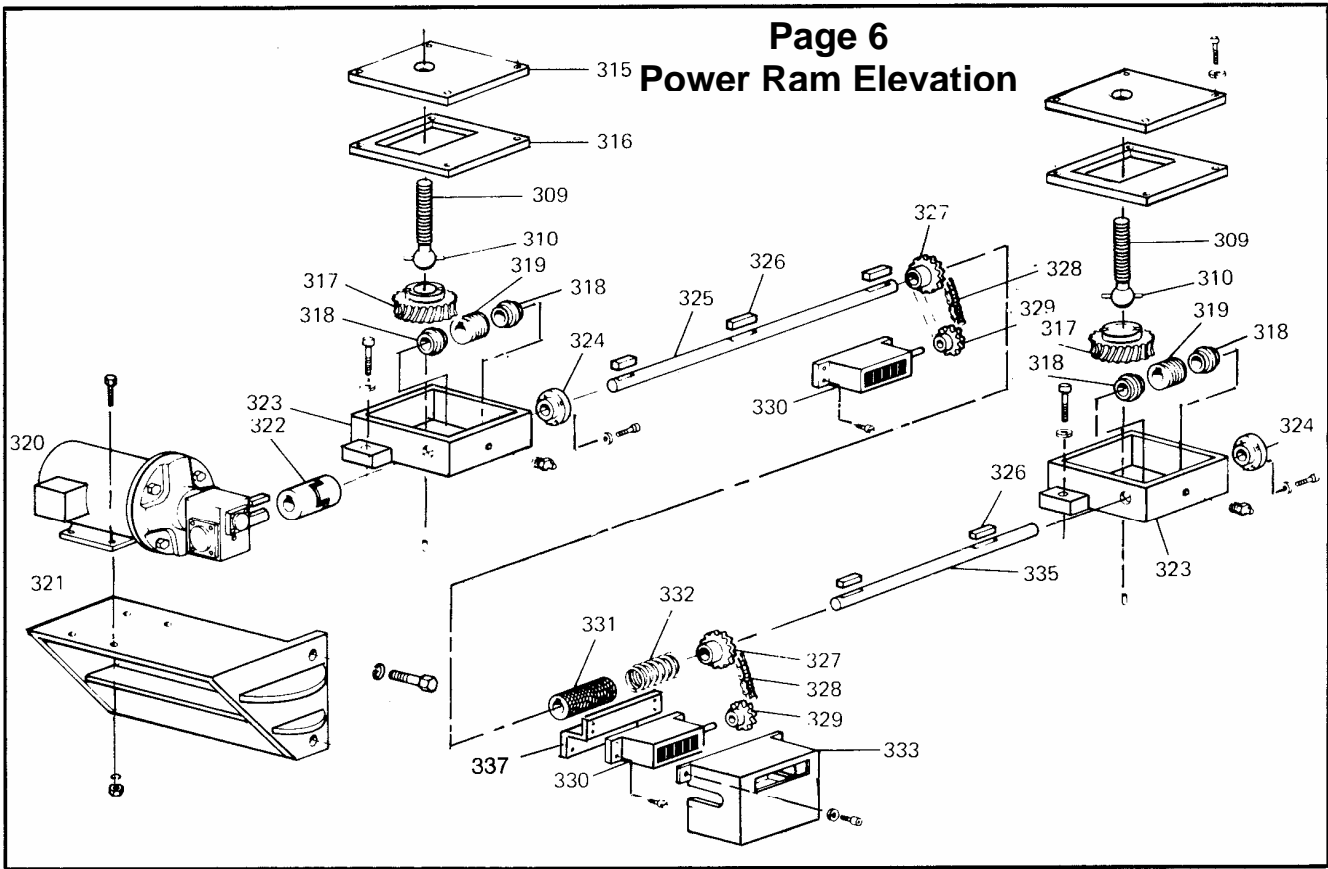
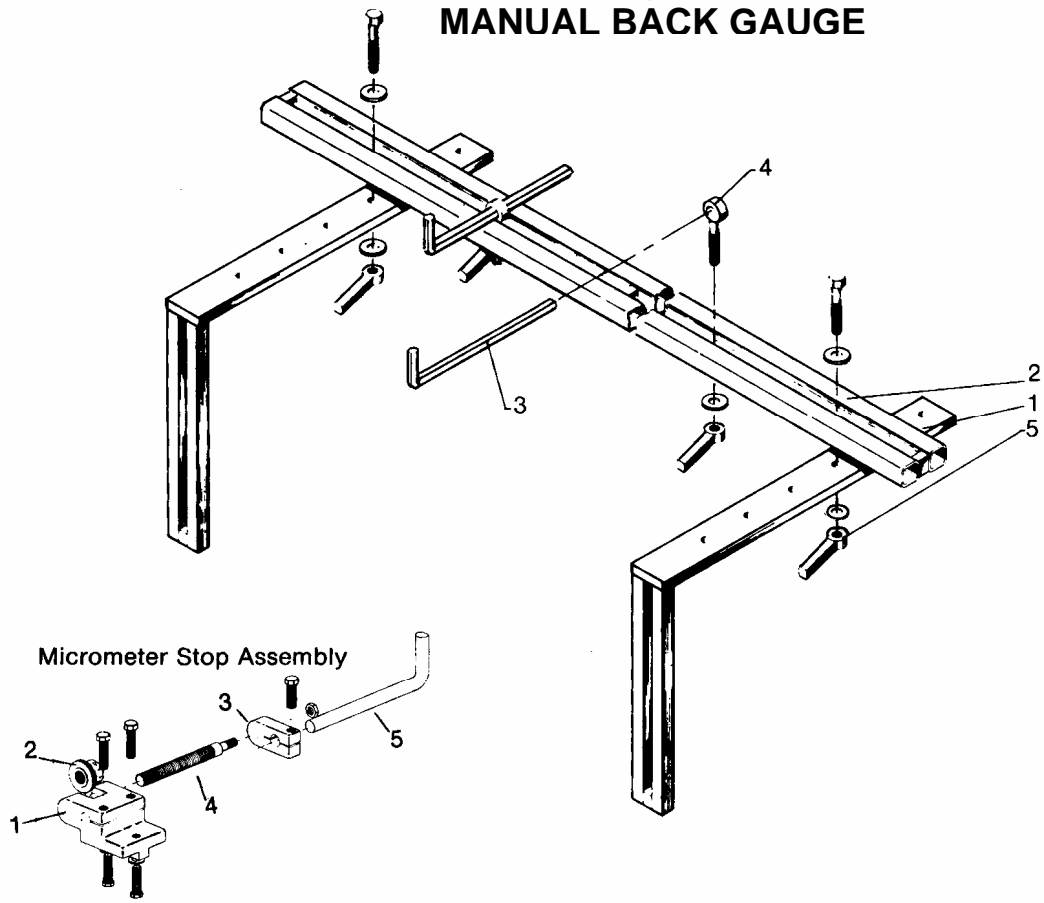


FIGURE 6 — POWER RAM ELEVATION (OPTIONAL)

ITEM	QUANTITY	DESCRIPTION	PART NUMBER
309	2	Ram Adj. Screw	7435-257
310	2	Pin	7435-258
315	2	Cover, Housing	7035-113
316	ASN	Shim, Nut Retainer .003	3328-336
	ASN	Shim, Nut Retainer .005	3328-337
	ASN	Shim, Nut Retainer .0075	3328-338
	ASN	Shim, Nut Retainer .010	3328-339
	ASN	Shim, Nut Retainer .020	3328-340
317	2	Gear, Worm, Ram Adj.	3436-764
318	4	Bearing, Thrust Ball	3102-005
319	2	Worm	3436-201
320	1	Motor 1/2HP 1800 RPM	4408-114
	1	Reducer Motor	3436-111
321	1	Base, Ram Adj. Motor	7035-067
322	1	Coupling	3428-030
323	2	Housing, Ram Adj.	7035-112
324	2	Cap. Housing Brg.	7035-019
325	1	Shaft, Left Power Ram Adj. (Model 2052)*	7435-377
326	2	Keys 3/16" Sq. x Lg.	3301-421
	2	Keys 3/16" Sq. 1 1/2 3/4 Lg.	3301-424
327	2	Sprocket, Elevation	7435-075
328	ASN	Chain -25	3430-030
329	2	Sprocket, Ram Adj. Indicator	7491-063
330	2	Counter	2201-240
331	1	Ram Adj. Coupling	7135-006
332	1	Spring	3504-107
333	2	Cover Elevation Counter	7235-336
335	1	Shaft, Right Power Ram Adj.	7435-380
337	2	Bracket, Elevation Counter	7435-339

\*Model 2072 — #7435-474

**Page 7**  
**MANUAL BACK GAUGE**



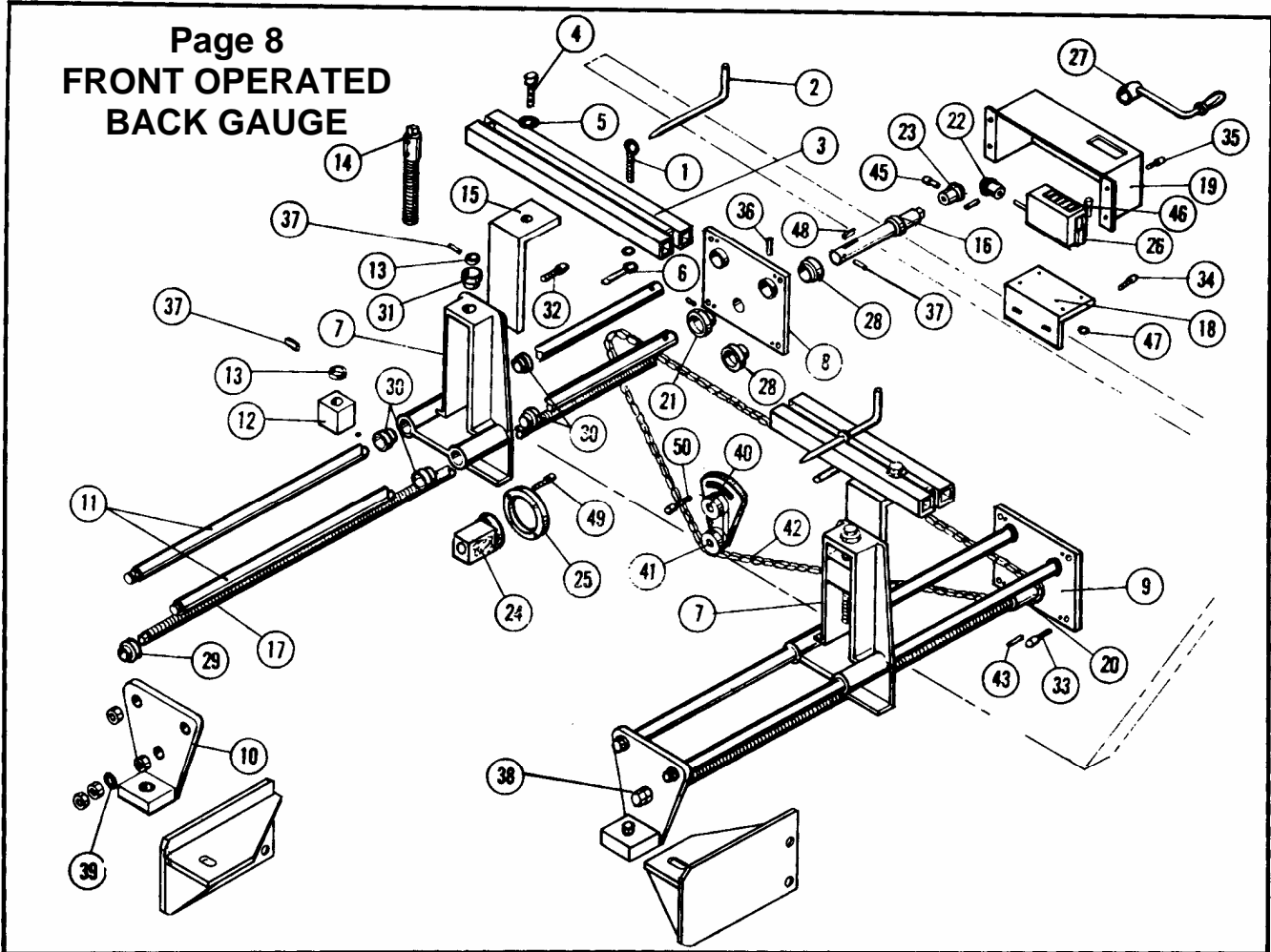
**FIGURE 7 — STANDARD BACK GAUGE**

ITEM	QUANTITY	DESCRIPTION	PART NUMBER
1	2	Bracket, Back Gauge .....	7135-059
2	1	Bar, Back Gauge Finger .....	7235-148
3	2	Finger, Back Gauge .....	7135-062
4	2	Eyebolts .....	3337-210
5	2	Handle, Nut .....	3356-020
	2	Micrometer Stop Assembly .....	7335-090-ND

**MICROMETER STOP ASSEMBLY**

ITEM	QUANTITY	DESCRIPTION	PART NUMBER
1	1	Housing, Micrometer Adjusting .....	7035-186
2	1	Knob-B.G. Micro Adj. ....	7435-631
3	1	Block-Mirco Clamp .....	7435-633
4	1	Screw-Micro Adj. ....	7435-632
5	1	Rod-Gage .....	7435-629

Page 8  
**FRONT OPERATED  
 BACK GAUGE**



**FIGURE 8 — PRECISION FRONT OPERATED BACK GAUGE**

ITEM	QUANTITY	DESCRIPTION	PART NUMBER
1	4	Eyebolt . . . . .	7185-191
2	4	Finger Back Gauge . . . . .	7185-152
3	1	Bar, Back Gauge Finger . . . . .	7235-181
4		Hex Hd. Cap Screw . . . . .	
5		Flat Washer . . . . .	
6	4	Nut Handle . . . . .	3356-020
7	2	Carrier, Back Gauge Stop . . . . .	7085-068
8	1	Mounting Plate R.H. . . . .	7085-434
9	1	Mounting Plate L.H. . . . .	7085-070
10	2	Bearing Plate . . . . .	7085-071
11	4	Guide Rod . . . . .	7185-339
12	2	Slide Block . . . . .	7185-340
13	6	Collars . . . . .	3302-013
14	2	Elevation Screw . . . . .	7185-342
15	2	Bracket, Back Gauge . . . . .	7185-343
16	1	Stub Shaft Long . . . . .	7435-256
17	1	Screw, R.H. . . . .	3356-375
	1	Screw, L.H. . . . .	3356-377
18	1	Counter, Mounting Bracket . . . . .	7185-352
19	1	Counter, Cover . . . . .	7085-072
20			
21	2	Sprocket . . . . .	7185-354
22	1	Counter Gear . . . . .	3435-001
23	1	Counter Gear . . . . .	3436-003
24	2	Nut Back Gauge . . . . .	3356-750
	2	Micrometer Stop Assembly . . . . .	7335-090-ND

(continued next page)

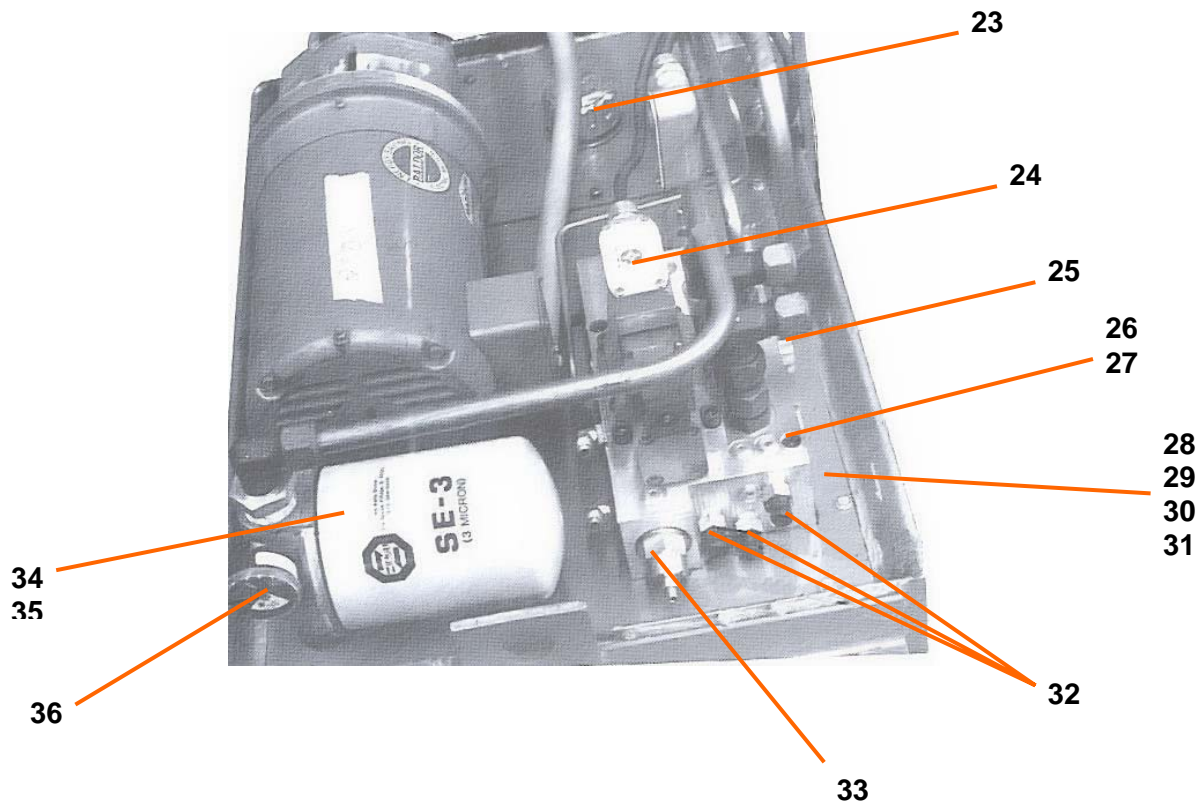
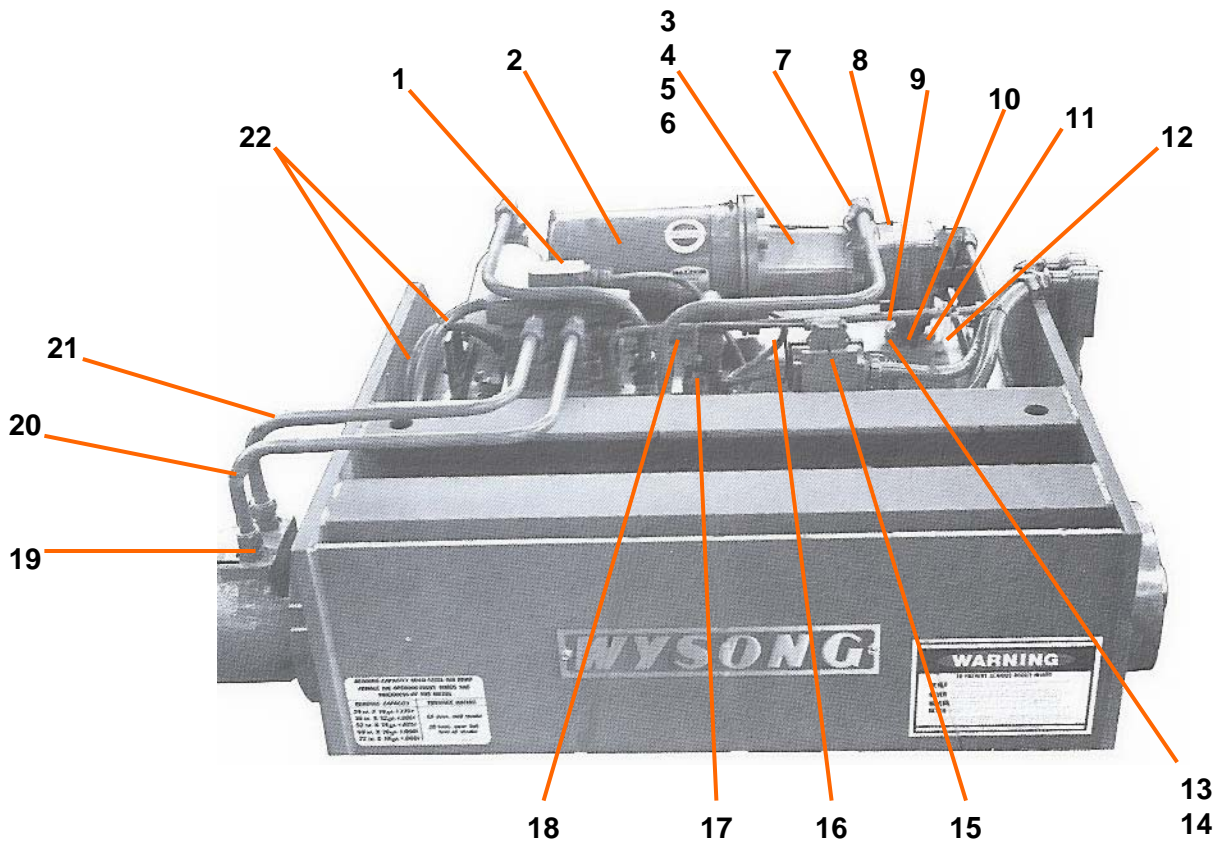


**PRECISION FRONT OPERATED BACK GAUGE**

ITEM	QUANTITY	DESCRIPTION	PART NUMBER
26	1	Counter .....	2201-230
27	1	Crank Handle .....	2203-022
28	3	Bearing .....	3132-057
29	2	Bushing, Bronze .....	3121-067
30	8	Bushing, Bronze .....	3120-288
31	2	Bushing, Bronze .....	3121-070
31A	2	Bushing, Bronze .....	3121-053
32	4	Hex Hd. Cap Screw	
33	8	Hex Hd. Cap Screw	
34	2	Hex Hd. Cap Screw	
35	4	Soc. Hd. Cap Screw	
36	4	Roll Pin	
37	6	Roll Pin	
38	2	Nut 5/8" Lock .....	3324-028
39	2	Thrust, Washer .....	3105-116
40	1	Drive Tensioner .....	3412-300
41	1	Sprocket .....	3412-250
42	CTL	Chain 3/8" Pitch #35 .....	3430-035
		Link, Chain Connection .....	3430-235
43	8	Socket Hd. Set Screws	
44	1	Socket Hd. Set Screws	
45	1	Socket Hd. Set Screws	
46	4	Socket Hd. Set Screws	
47	4	Nuts	
48	2	Keys	
49	3	Socket Hd. Cap Screws	
50	2	Hex Hd. Cap Screws	
51	1	Bracket R.H. Support .....	7235-179
51	1	Bracket L.H. Support .....	7235-180
52*	1	Counter, Gear Collet .....	7185-356
53*	2	Wrench, Ratchet .....	5093-593
		Micrometer Stop Assembly (Shown on page 20) .....	7335-090-ND

\*Parts not illustrated

Page 10  
FIGURE 9 – HYDRAULIC GROUP



**Page 11**  
**HYDRAULIC GROUP**

ITEM	QUANTITY	DESCRIPTION	PART NUMBER
1	1	4-Way Valve	3753-505
2	1	Motor	4420-013
3	1	Pump Flange	3257-069
4	1	Motor Coupling	3428-207
5	1	Pump Coupling	3428-208
6	1	Insert Coupling	3428-209
7	1	Low Pressure Pump Line Assembly	STD-660-ND
8	1	Hydraulic Pump	3257-110
9	1	High Pressure Pump Line Assembly	STD-659-ND
10	1	Return Flange	3773-097
11	1	Suction Filter (Not Shown)	3764-315
12	1	Tank Access Cover	7435-679
		Access Cover Gasket	4904-189
13	1	Suction Pipe	7235-286
14	1	Gasket	4904-195
15	1	Pressure Switch	4166-082
16	1	Pressure Switch Line Assembly	STD-662-ND
17	1	2-Way Valve	3749-105
18	1	Check Valve	3755-388
19	1	Rotary Actuator	3746-030
20	1	Tube Assembly (Front L.H.)	3859-812
21	1	Tube Assembly (Rear L. H.)	3859-811
22	1	Hose, Speed Control	3898-115
23	1	Breather Filter	3202-100
24	1	4-Way Valve	3753-505
25	1	Plug	3755-801
26	1	Manifold	3773-621
27	1	Manifold Gasket, Large	4904-190
28	1	Tank	7235-288
29	1	Seal (Not Shown)	4540-305
30	1	Plug Fitting (Not Shown)	3837-009
31	1	Sight Level Gauge (Not Shown)	3205-115
32	3	Relief Valve	3762-298
33	1	Sequence Valve	3759-357
34	1	Return Filter	3764-318
35	1	Gasket (Not Shown)	4904-193
36	1	Pressure Filter Gauge	3237-170