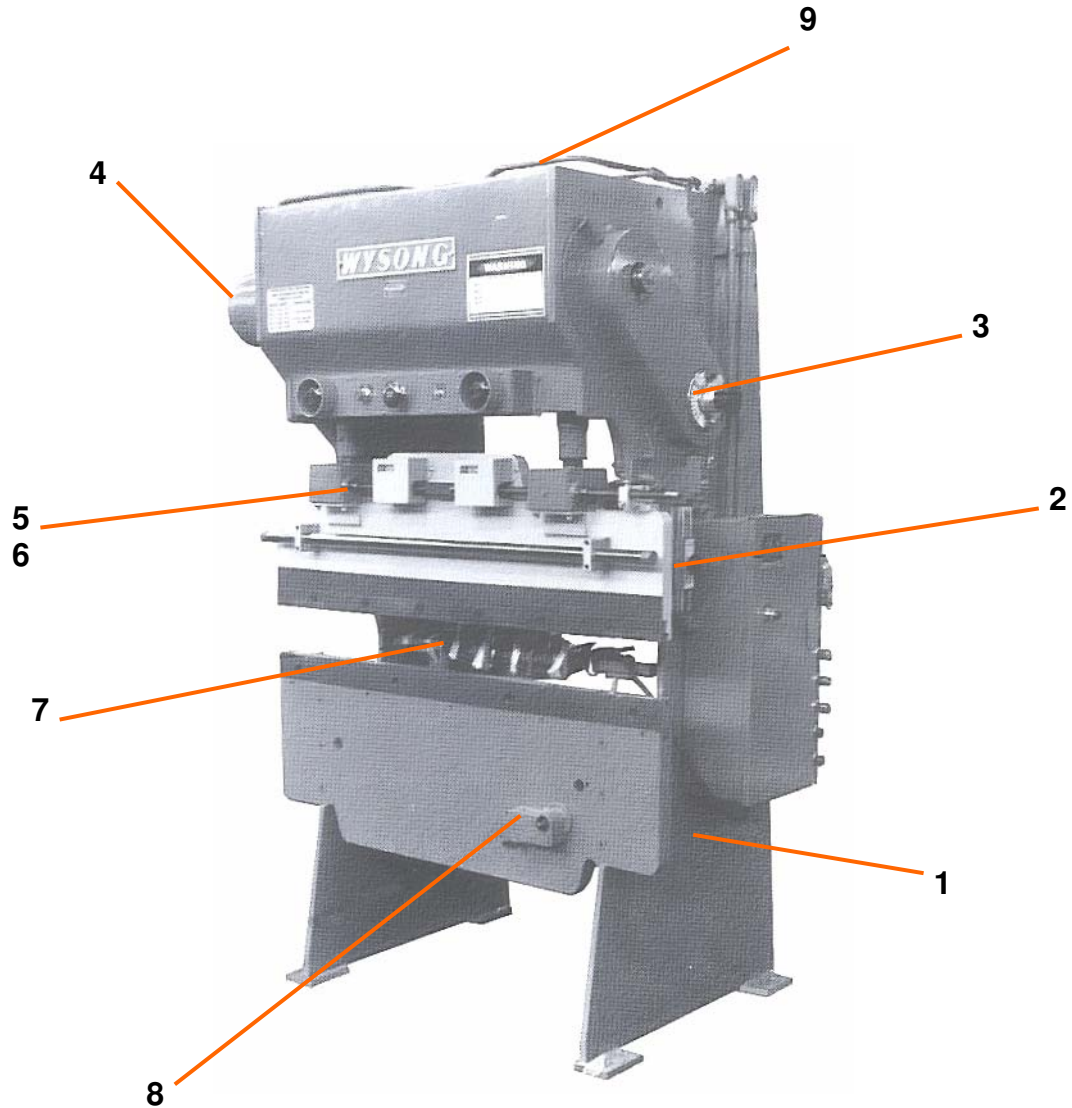


H-20 TON HYDRA-MECHANICAL PRESS BRAKE



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

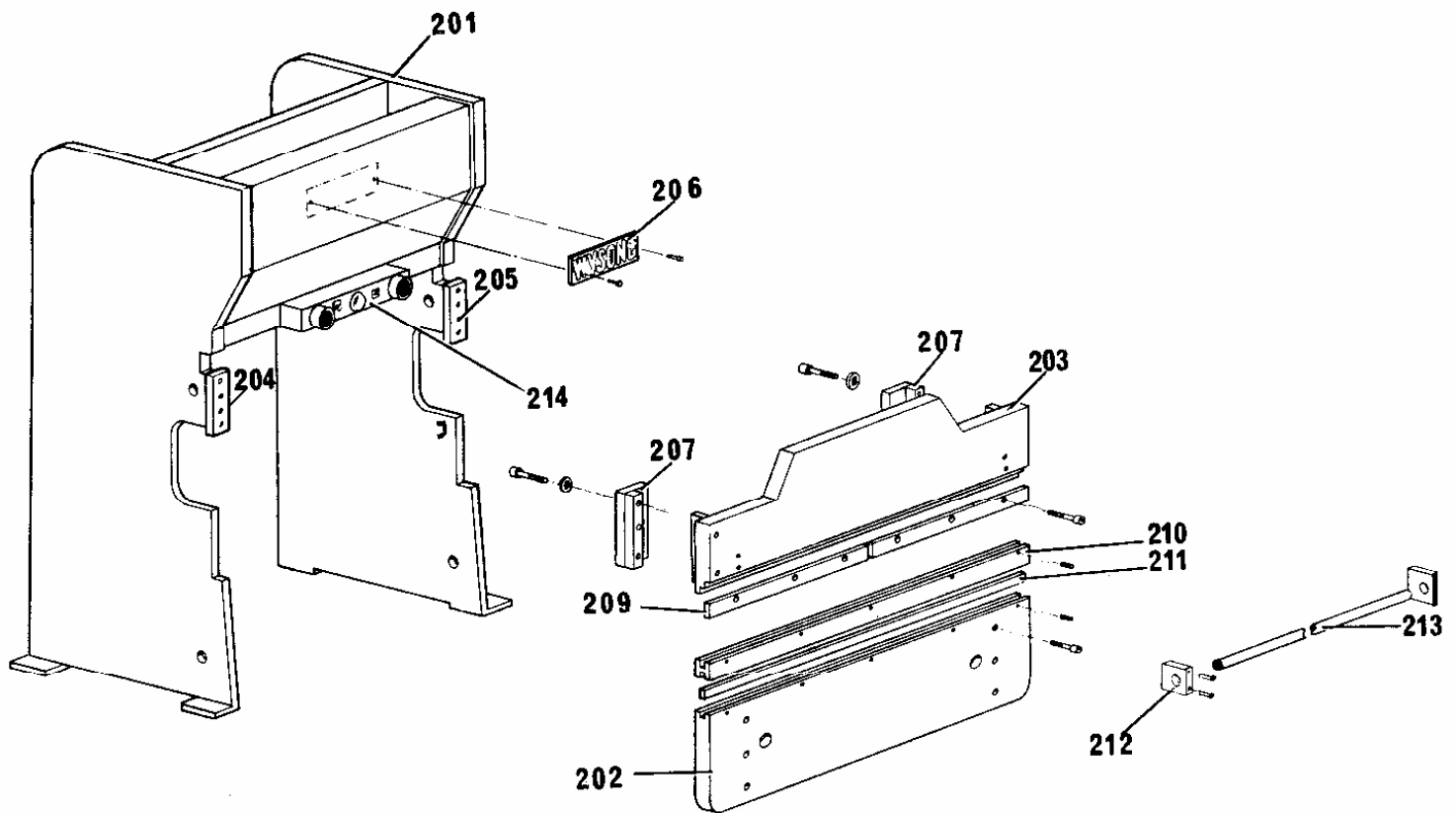


FIGURE 1 — FRAME ASSEMBLY

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	1	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

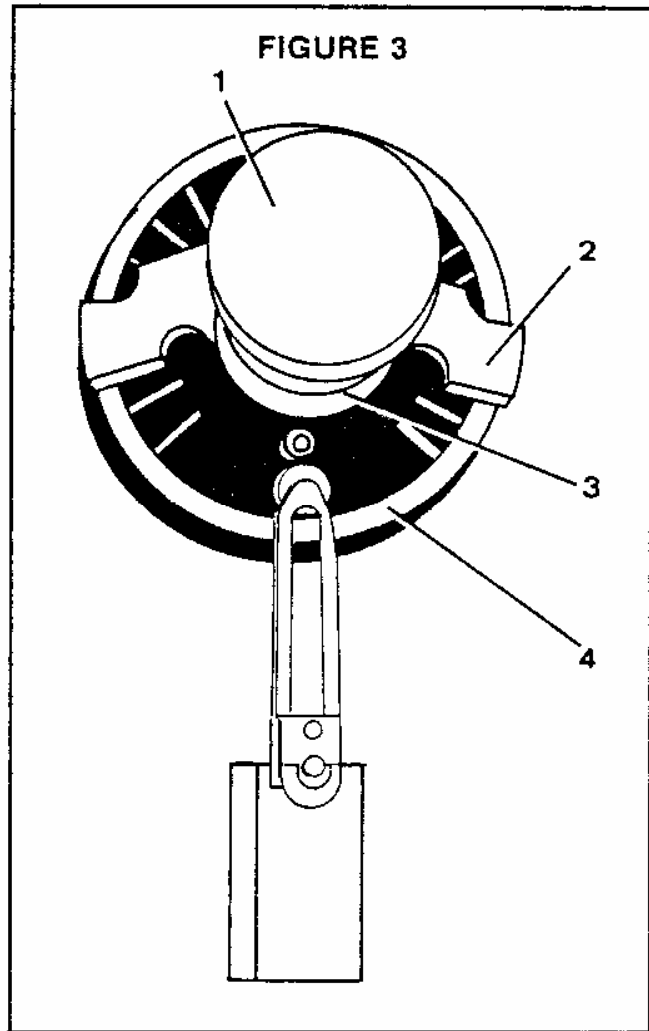
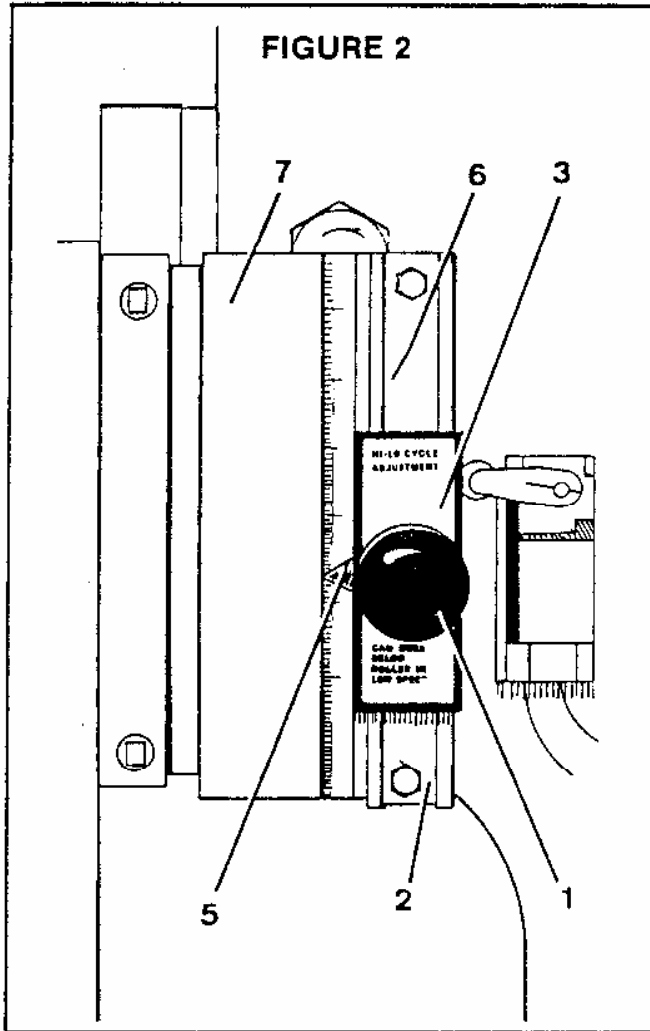


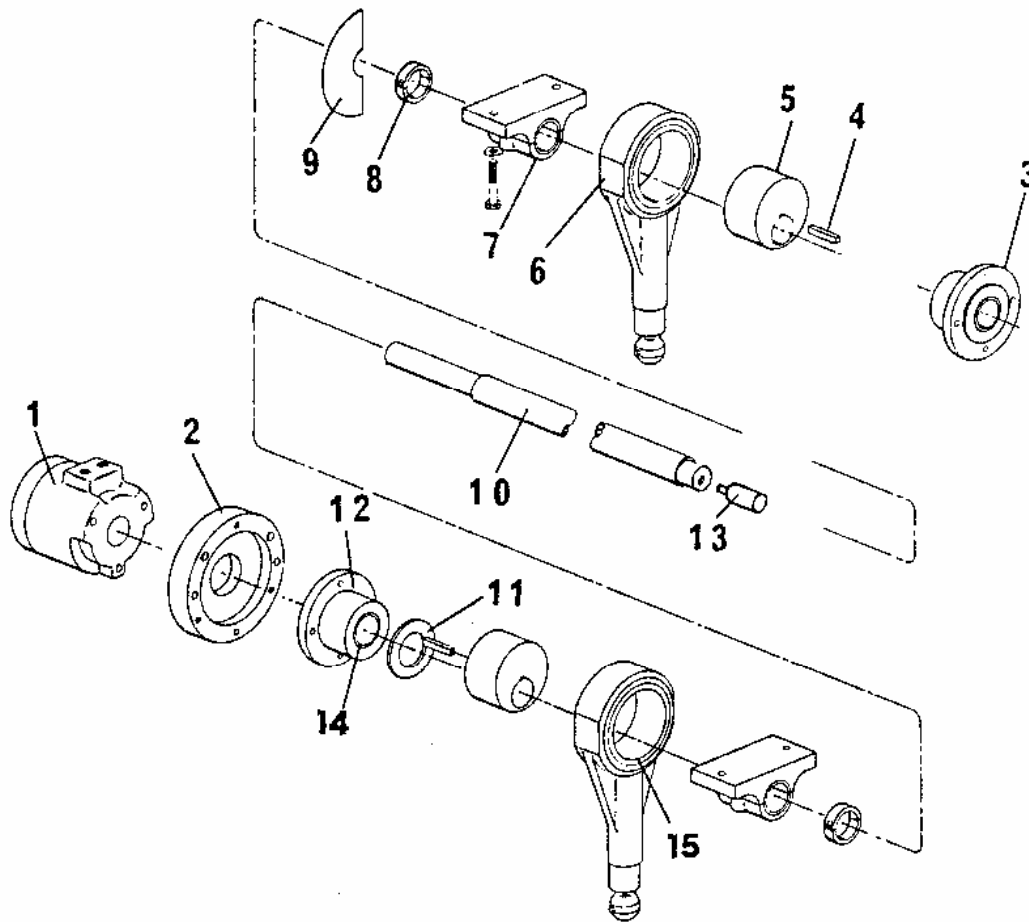
FIGURE 2 — HI-LO CYCLE ADJUSTMENT

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

This diagram illustrates the exploded view of the RAM ELEVATION mechanism. The components are labeled with numbers and their assembly relationships are shown by dashed lines. The main assembly consists of a base (323) and a top cover (316). The base is mounted on a support (330) and includes a motor (333) and a gear train (327, 328, 329). The top cover (316) is secured by a screw (309) and a nut (310). The gear train includes a large gear (327) and a smaller gear (328) mounted on a shaft (329). The base also features a bracket (337) and a pin (336). The diagram shows the assembly of the base, the motor, the gear train, and the top cover.

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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

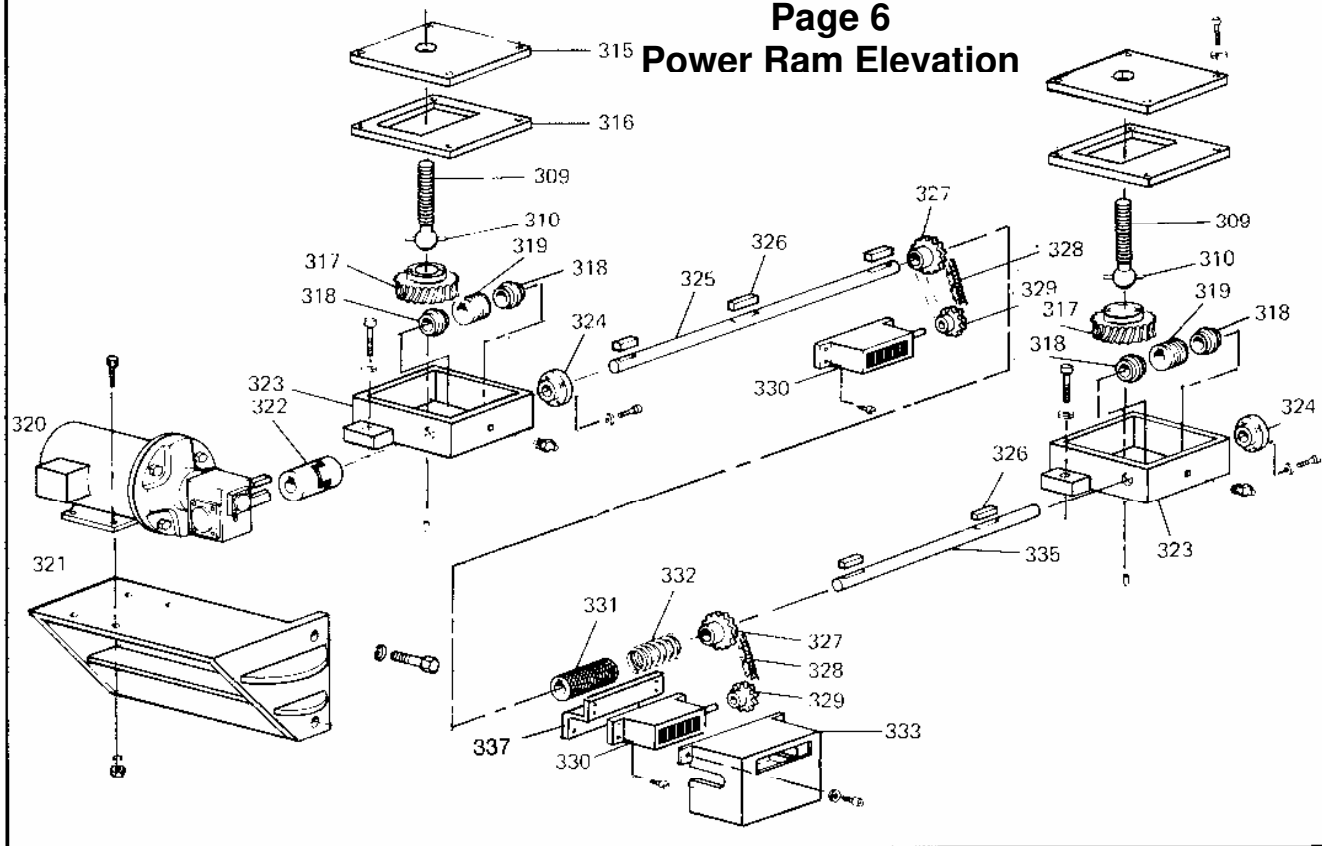


FIGURE 6 — POWER RAM ELEVATION (OPTIONAL)

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

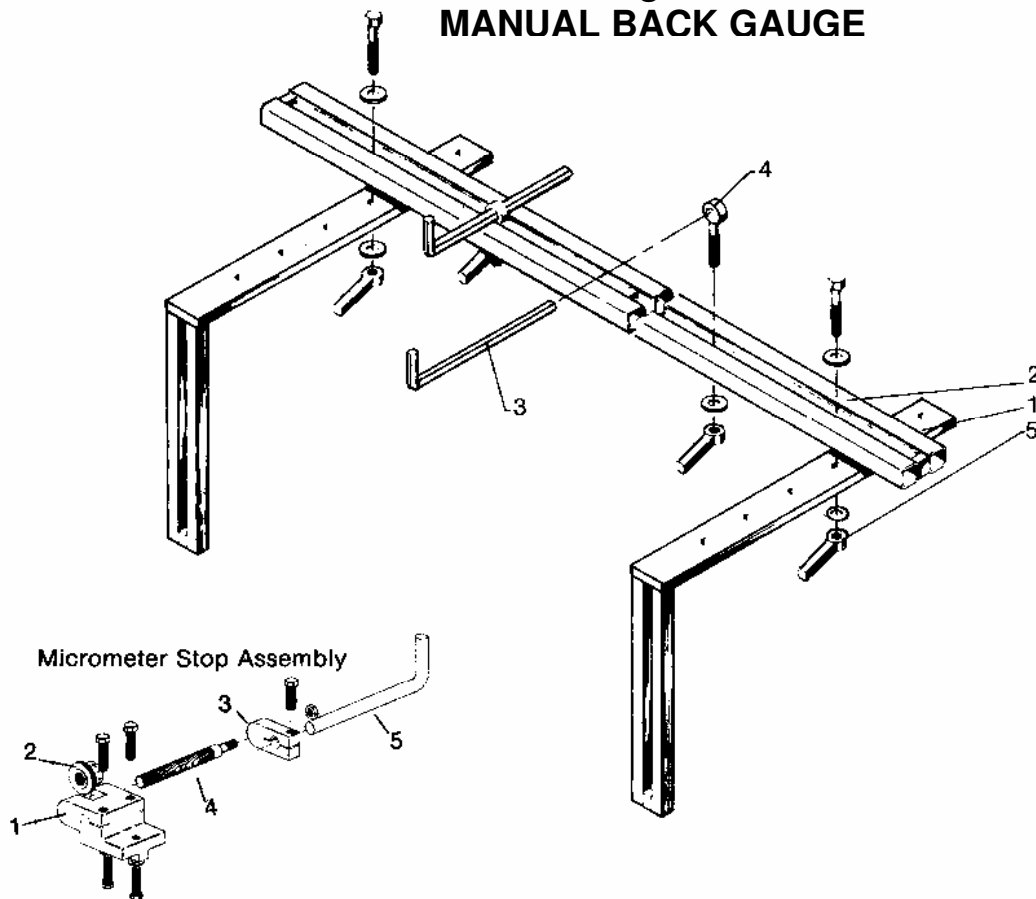


FIGURE 7 — STANDARD BACK GAUGE

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-Micro Clamp	7435-633
4	1	Screw-Micro Adj.	7435-632
5	1	Rod-Gage	7435-629

Page 8
FRONT OPERATED
BACK GAUGE

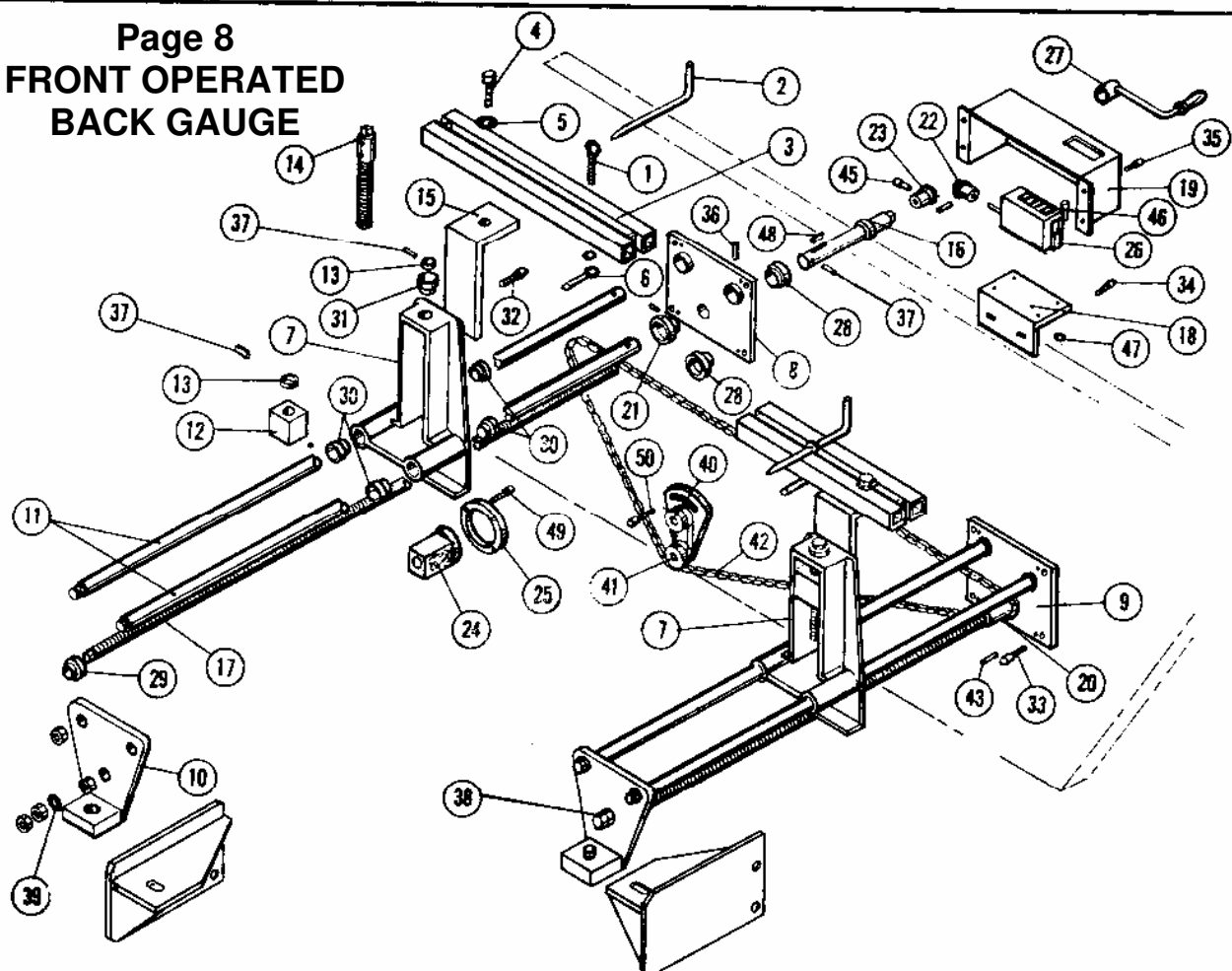


FIGURE 8 — PRECISION FRONT OPERATED BACK GAUGE

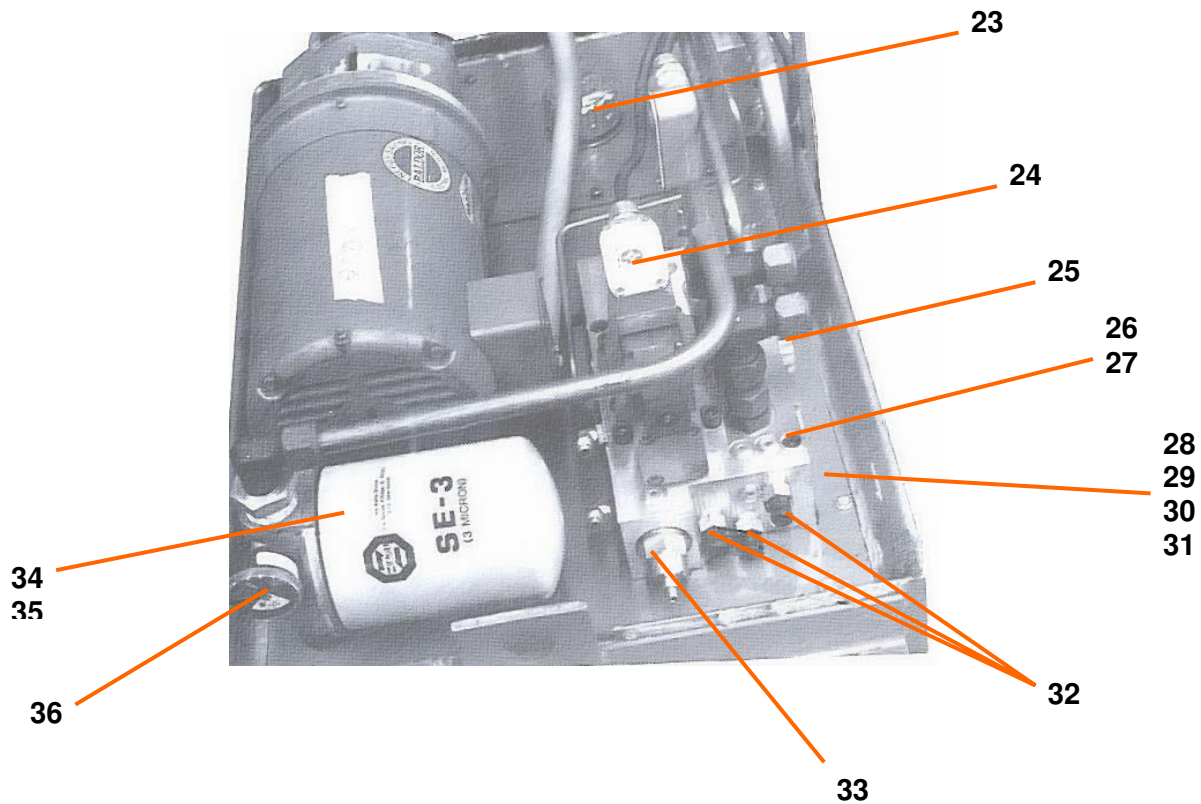
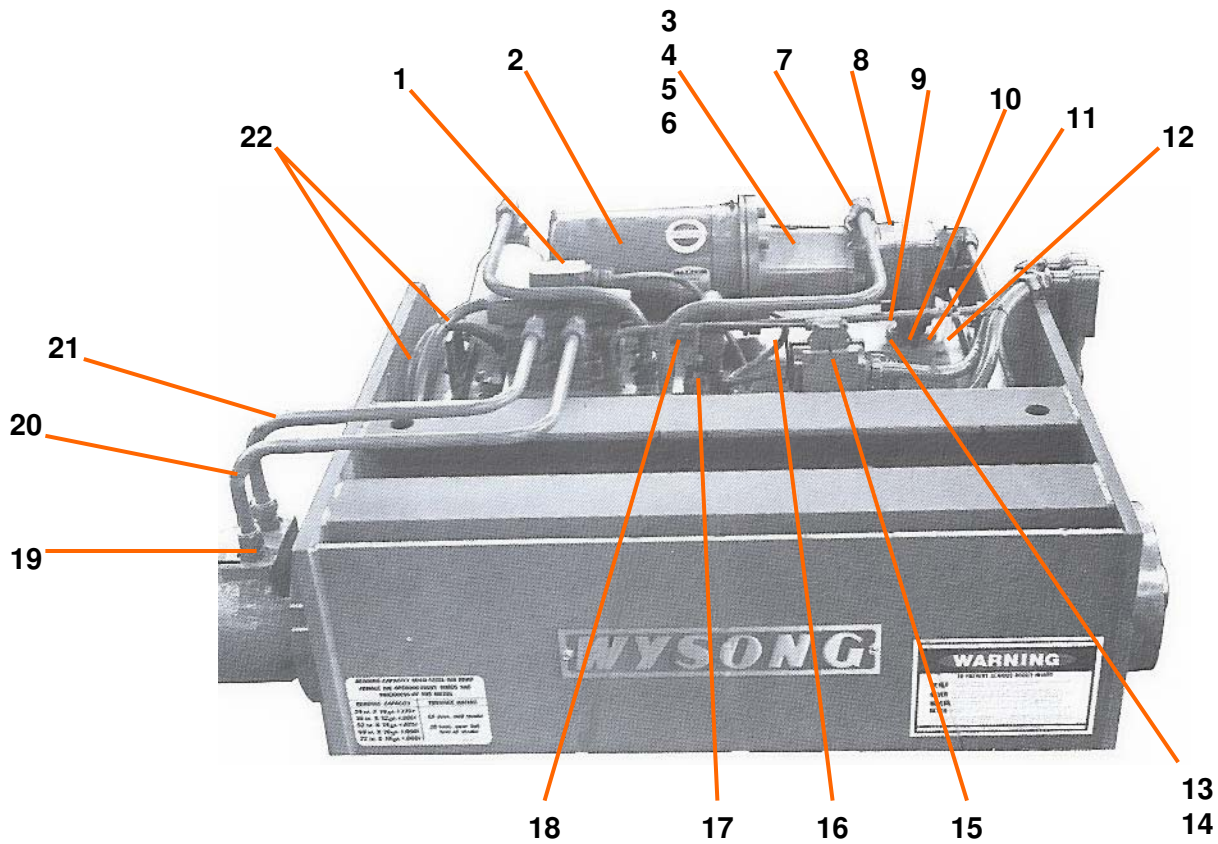
ITEM	QUANTITY	DESCRIPTION	PART NUMBER
1	4	Eyebolt	7185-191
2	4	Finger Back Gauge	7185-152
3	1	Bar, Back Gauge Finger	7235-181
4		Hex Hd. Cap Screw	
5		Flat Washer	
6	4	Nut Handle	3356-020
7	2	Carrier, Back Gauge Stop	7085-068
8	1	Mounting Plate R.H.	7085-434
9	1	Mounting Plate L.H.	7085-070
10	2	Bearing 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 $\frac{5}{8}$ " Lock	3324-028
39	2	Thrust, Washer	3105-116
40	1	Drive Tensioner	3412-300
41	1	Sprocket	3412-250
42	CTL	Chain $\frac{3}{8}$ " Pitch #35	3430-035
	1	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			

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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