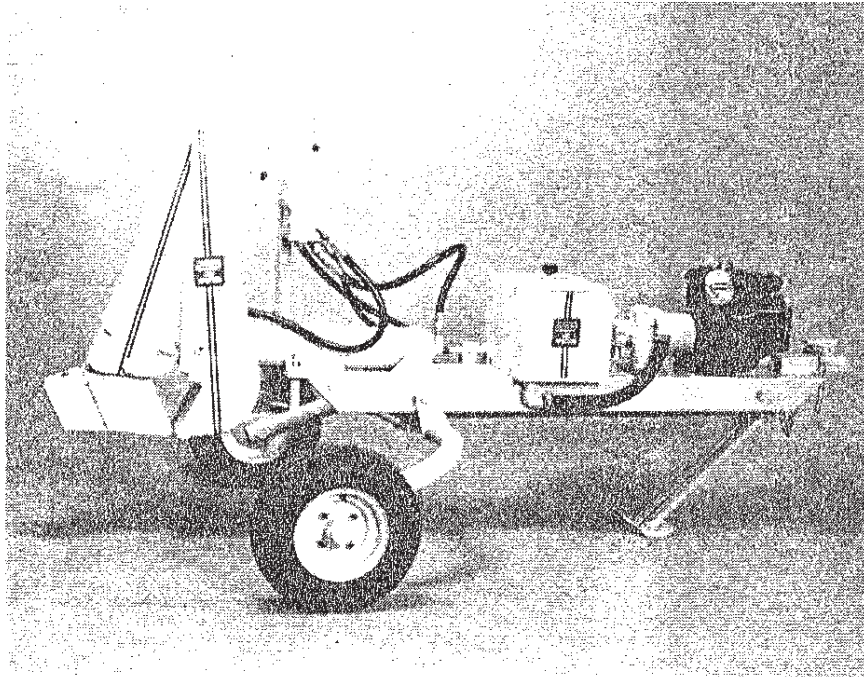


AP5600-5 5HP  
AP5600-5I 5HP IC  
AP5600-8I 8HP IC  
AP5600-9U 9HP Van Gaard

OPERATOR'S - SERVICE - PARTS MANUAL

FOR  
TRAILER LOG SPLITTER  
MODEL AP5400



ON I-80 EXIT 267 SOUTH  
R.R. 1 MOSCOW, IA 52760

AP 5733 Belief  
- start open @ 3100  
Sall given @ 3500



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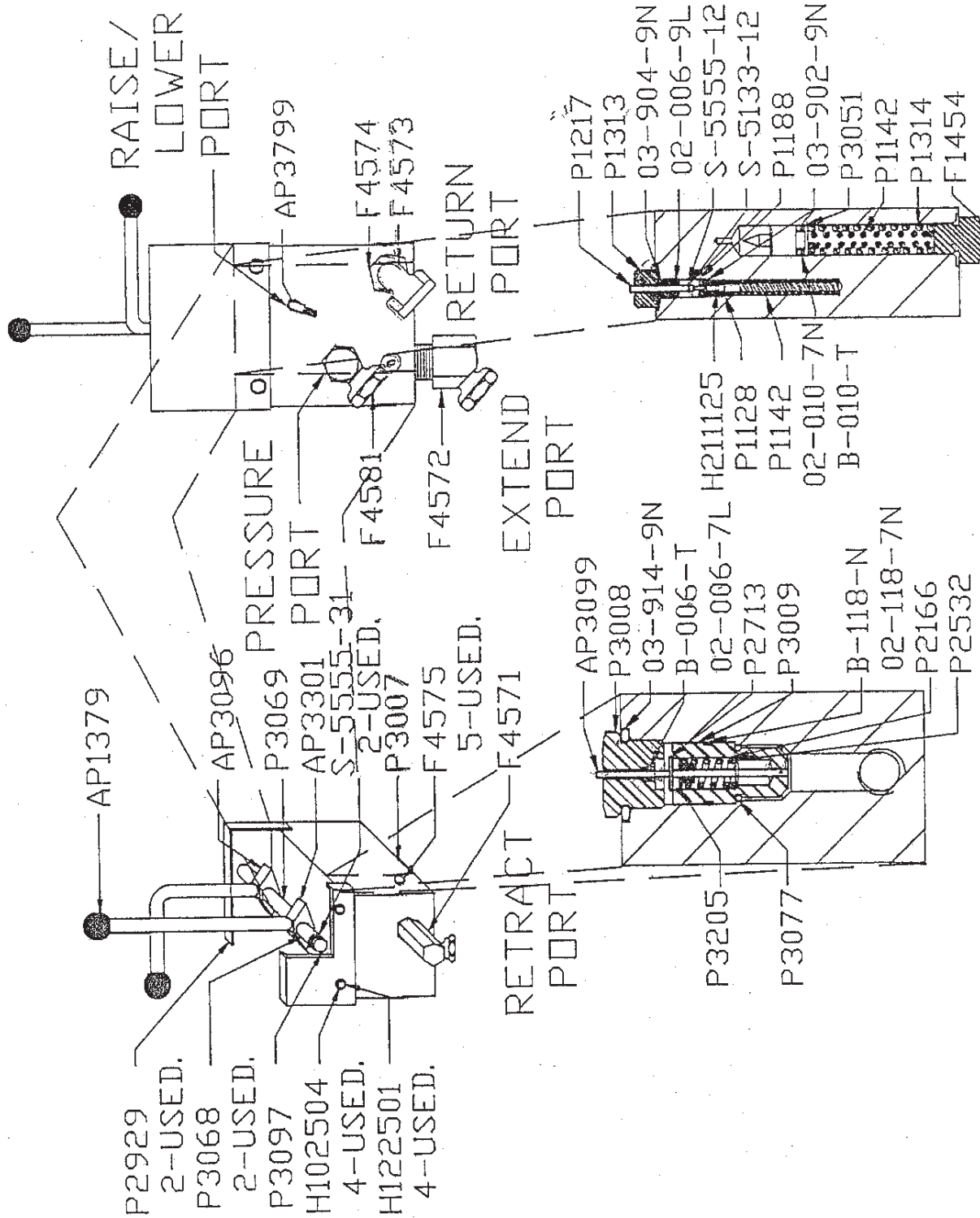
42

LIFT CYLINDER ASSEMBLY

AP4451

PART NO	QUANTITY	DESCRIPTION
AP4450	1	Barrel Assembly
AP4449	1	Rod
F1511	1	4-CCTX-S LG Male Elbow
P4567	1	Snap Ring 1.5 X .090
O2-325-7L	1	"O" Ring 1.5
B-325-T	1	Back Up Ring 1.5
W-940-17	1	Wiper 1.5

# VALVE ASSEMBLY (OPEN CENTER)



MP7515

03/08/90

CAUTION ! Read and understand Operator's Manual clearly before operating.

#### LOG SPLITTER PREPERATION

1. Do not tow over 45 MPH. See towing instructions. (MP )
2. Do not check for hydraulic leaks with hands, etc. High pressure oil leaks can cause serious injuries.
3. Operate engine only in a well ventilated area.
4. Wear proper protective equipment such as approved safety glasses, hard hat, gloves, safety shoes, etc. when splitting logs.
5. Keep all body parts clear of ram and splitting wedge while splitter is in operation.
6. Do not anchor splitter to ground as restriction of movement can result in damage or injury.
7. Exhaust spark arrestor may be required in some states.
8. Check engine oil. (MP )
9. Check hydraulic oil. (MP )

*Preliminary*

## TOWING INSTRUCTIONS

1. Raise splitter to the full up position and close jaws.
2. Shut off engine.
3. Swing jaw support bar to the rear of the splitter.
4. Rotate top of jaws to the left until jaws rest on support arm.
5. Tighten cylinder rotation "T" handle.
6. With the front of the splitter supported, pull the pin the front of the leg support.
7. Swing leg support up and place the pin in rear hole on leg; (Note this locks the front leg up and rear wheels down.)
8. Hitch splitter to vehicle. Be sure hitch is properly adjusted. 2 inch ball is required.
9. Cross safety chains under tongue and attach to vehicle.
10. Recommended towing speed not to exceed 45 MPH.

## LOG SPLITTER OPERATION

**CAUTION !** Do not operate splitter while attached to the vehicle.

1. Pull the pin the front leg support, allowing the leg to swing down, Replace the pin with the leg in the down position. (If pin is tight the engine may have to be started and the splitter raised to the full up position. See instructions and cautions on starting engine.)
2. Rotate jaws to the vertical position. Tighten the "T" handle on the cylinder friction clamp after positioning the jaws. Swing the jaw support bar to the front of the splitter.
3. Start engine (See engine manual). Make sure stop switch is not against spark plug.
4. Pull recoil starter, choke engine if necessary. (See engine manual)
5. Pump has clutch to permit easier starting in cold weather. Allow engine and hydraulic fluid to warm before splitting logs.
6. Raise splitter to proper height, with control lever, to clear size of log to be split.
7. Open splitter fully (Extend cylinder)
8. Position log between knife and push plate.
9. Close jaws with control lever to split log.
10. If log does not split completely, extend cylinder and insert a pusher block or log and close to complete splitting.
11. Splitting angle may be adjusted by loosening the friction clamp on the main cylinder and rotating the jaws. Be sure to tighten the friction clamp after repositioning head. Shut off engine while rotating head.

## INITIAL SET UP

1. Remove shipping plug from top of hydraulic reservoir and discard. Replace plug with breather cap. Never operate with shipping plug in place as serious damage may occur.
2. Attach black knobs to control handles. (Breather cap and knobs are shipped separate to prevent loss or breakage during shipping).
3. Check engine oil. (See engine manual)
4. Check hydraulic oil. (See service section MP )
5. Add gasoline. Unleaded is acceptable. Do not mix oil with gasoline.

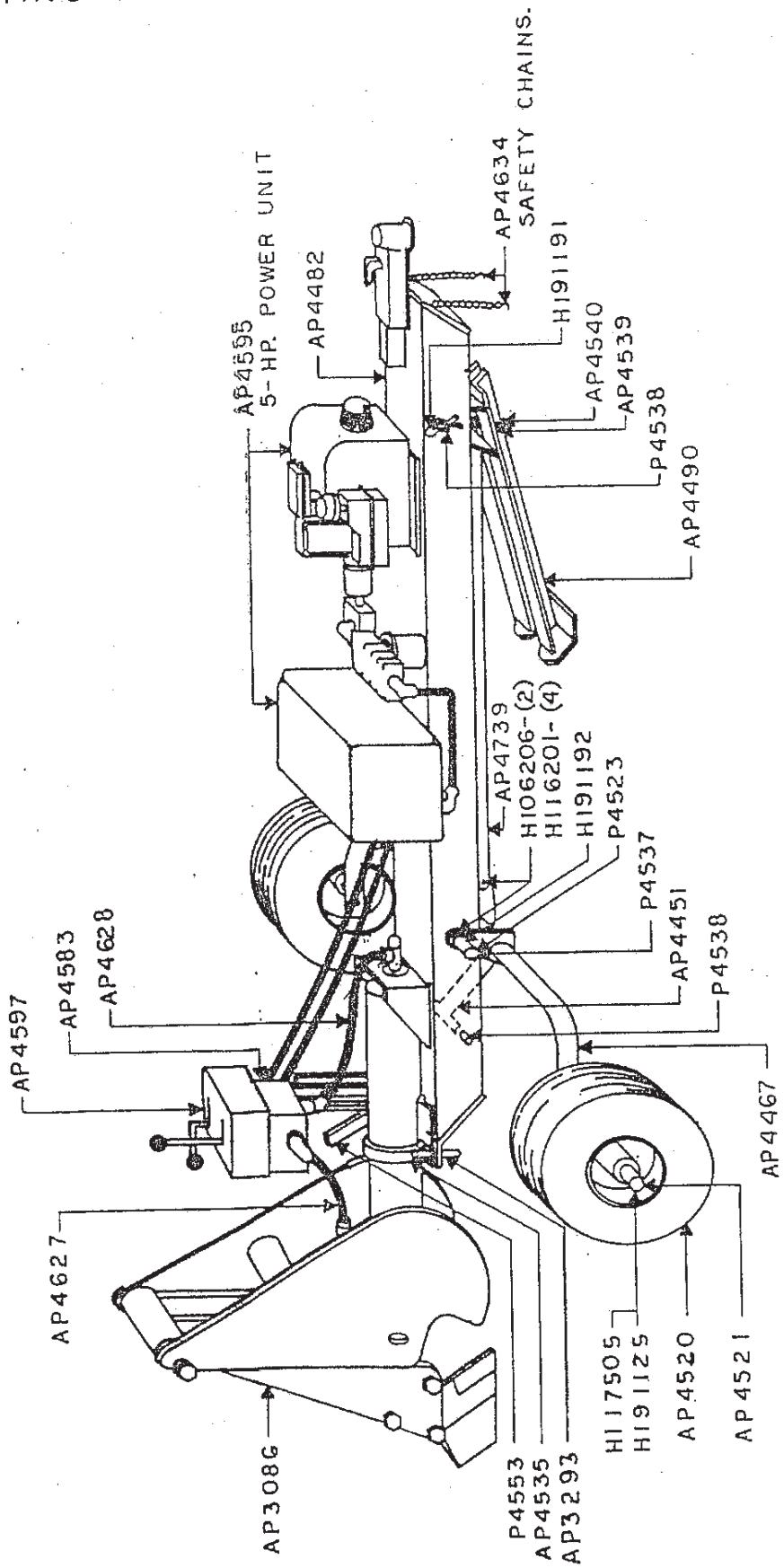


## SPLITTER SERVICE

1. Check engine oil and replace at recommended intervals. (See engine manual)
2. Check and clean carbureator air filter as required. (See engine manual)
3. Check hydraulic fluid, Be sure blade is closed (Retracted), Head lowered and engine off. Fill with type F or DEXTRON transmission fluid, 1 to 2 inches from top of tank.
4. After first 50 hours of operation, change oil filter element, and every 250 hours thereafter. Replace with element replacement kit number K-22002, available from HWH Corporation.
5. Change hydraulic oil every 2 years or immediately if contaminated by water, dirt, etc.

# SPLITTER ASS'Y LOW LIFT

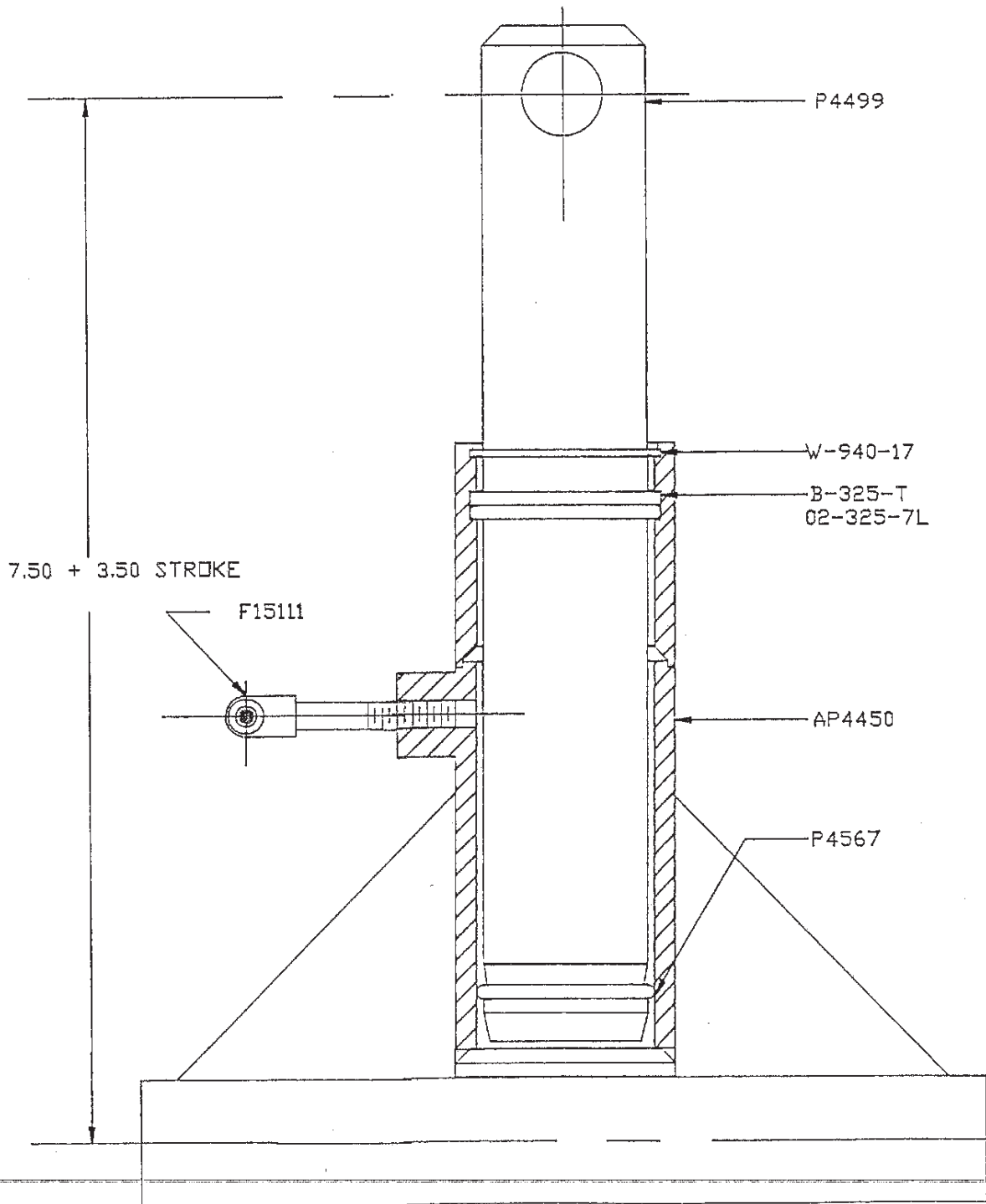
(MANUFACTURED BELOW SN. NO. 1388)



MP 7530

03/10/90

# LIFT CYLINDER



MP7514

03/01/90

## CYLINDER ASSEMBLY

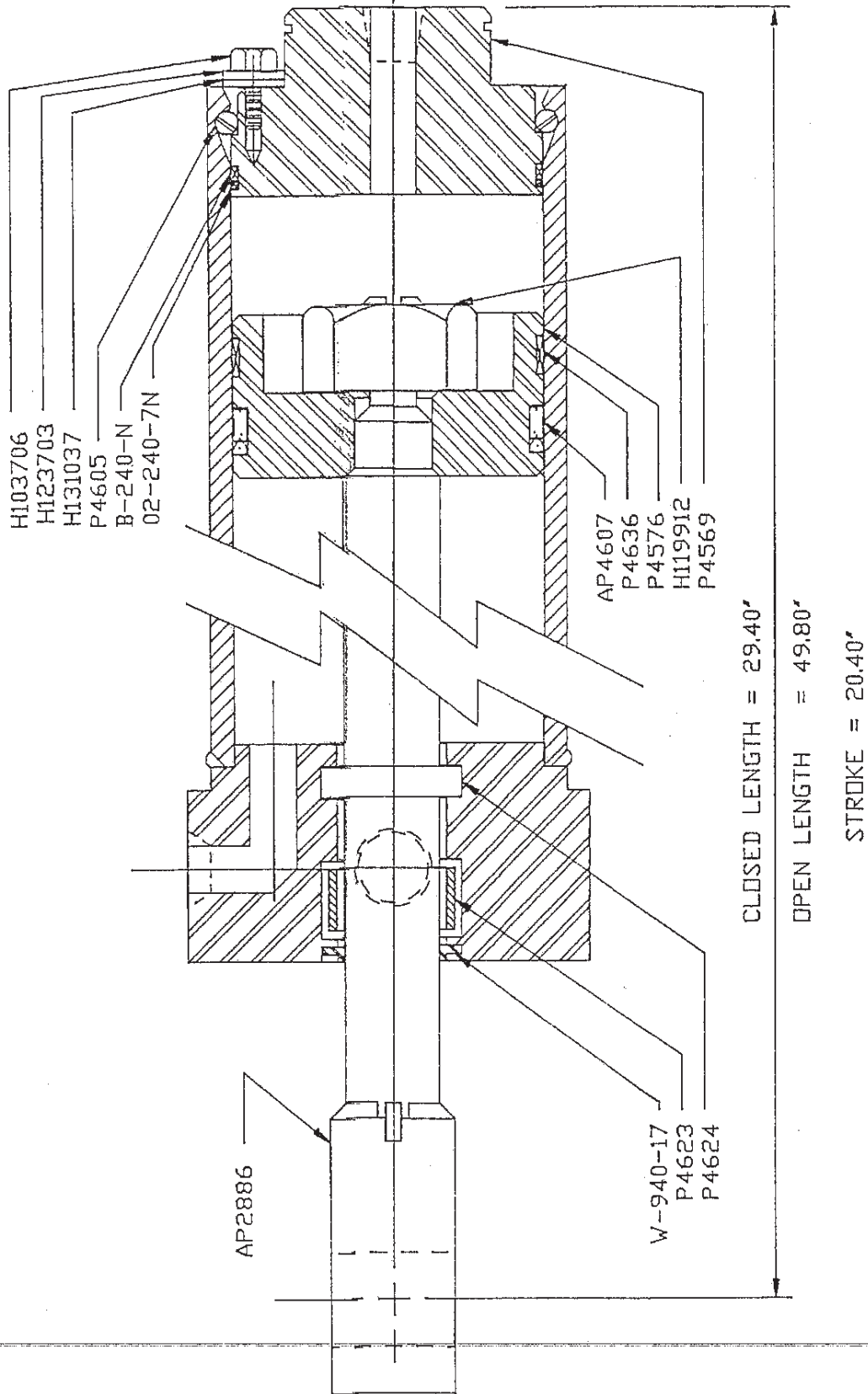
AP4578

PART NO	QUANTITY	DESCRIPTION
AP4746	1	Barrel Assembly
AP2886	1	Cylinder Rod With Eye
AP4607	1	Jar Seal 4
H119912	1	Hex Nut 1-1/4 12
H103706	3	HHCS 3/8-16 X 3/4
H123703	3	Lockwasher 3/8 Ext Star
H131037	3	Washer Common 3/8
P4576	1	Piston
P4636	1	W2-4000-500 Wear Ring
P4623	1	1901-28E Wear Ring 1-1/2
P4624	1	187-01.500-375ZA Poly Seal
P4650	1	Snap Ring 3/16 X 4
02-240-7N	1	"O" Ring 4
B-240-N	1	Back Up Ring 4
W940-17	1	Wiper 1-1/2

MP

06/29/90

# CYLINDER ASSEMBLY



MP7513

06/26/90

## CYLINDER &amp; JAWS ASSEMBLY

AP3086

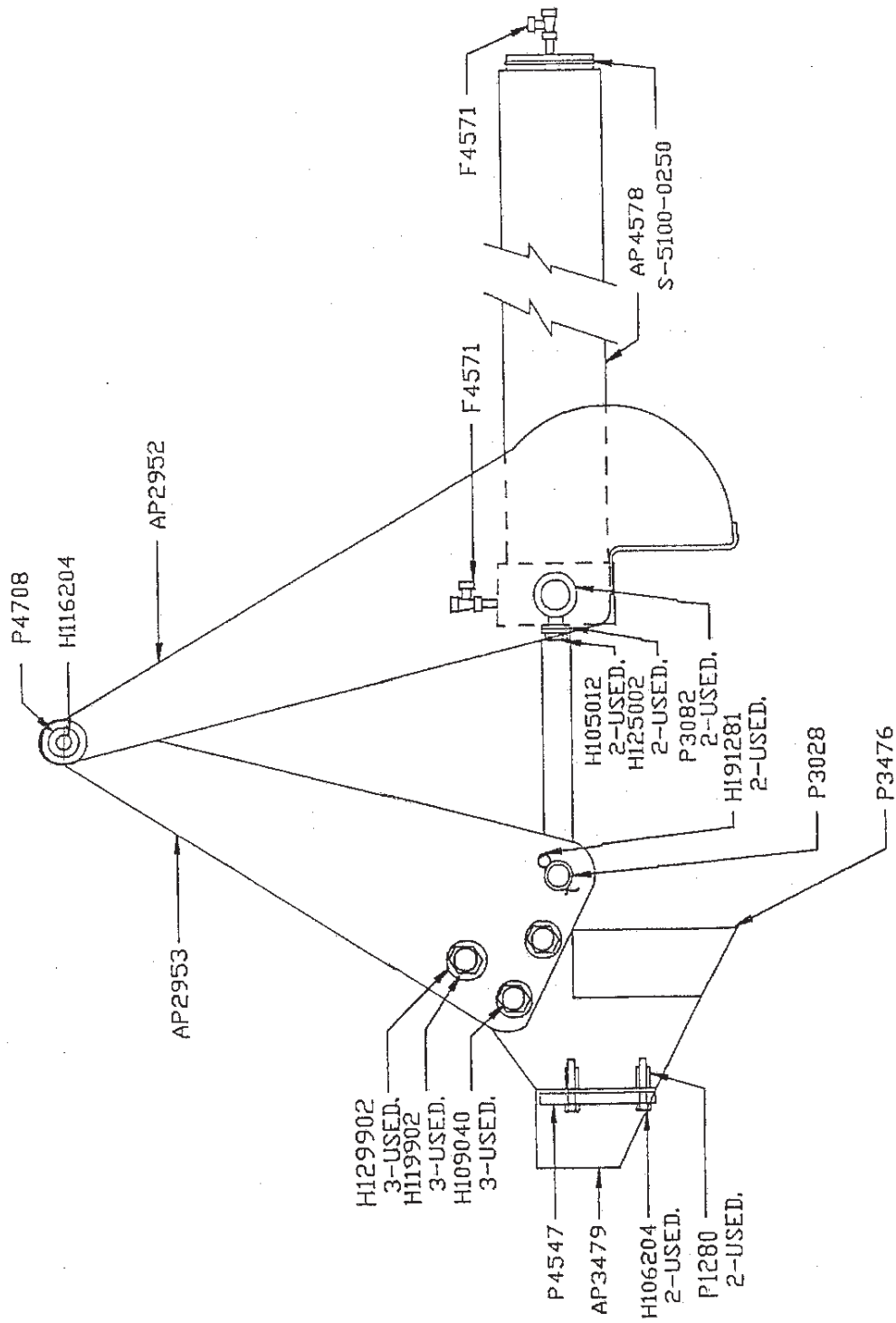
PART NO	QUANTITY	DESCRIPTION
AP4578	1	Cylinder Assembly
AP2952	1	Anvil Jaw Assembly
AP2953	1	Pivot Jaw Assembly
AP3479	1	Wedge
F4571	2	Fitting Elbow 1/2 NPT Swivel
H116204	1	5/8-11 Esna Lock Nut
H109040	3	1-8 UNC X 4" HHCS GD 5
H119902	3	1-8 UNC Hex Jam Nut
H129901	3	1" Lockwasher Ext Star
H191281	2	Cotter Pin 5/16 X 3
H105012	2	1/2-13 X 1-1/4 HHCS GD 5
H125002	2	1/2 Lockwasher
H106204	2	5/8-11 X 2.25 HHCS GD 5
P4708	1	Pivot Bolt 5/8 X 6.9
P3476	1	Blade
P3028	1	Pivot Pin 1-1/4 X 4.5
P3082	2	Pin 1-1/4 X 2.4
P4547	1	Wedge Pivot Bar
P1280	2	Bushing .625 ID
S-5100-0250	1	Snap Ring 2.5

SPLITTER ASSEMBLY  
HIGH LIFT SPLITTER MANUFACTURED ABOVE SN. 1388

PART NO	QUANTITY	DESCRIPTION
AP3086	1	Cylinder & Jaws Assembly (See Page MP7512)
AP4451	1	Lift Cylinder Assembly (See Page MP7514)
AP4583	1	Control Valve Assembly (See Page MP7515)
AP4597	1	Valve Cover & Support
AP5635	1	Main Frame
AP5639	1	Axle Assembly
AP5636	1	Front Leg Support Assembly
AP4520	2	480 X 8 Tire w/ 4 Hole Wheel
AP4521	2	Hub Assembly 4 Bolt w/ Bearings, Seal, and Dust Cap
AP3293	1	"T" Handle
AP4535	1	Cylinder Hold Down Friction Clamp
AP5637	1	Drag Link
AP4539	1	Leg Support Pin
AP4634	2	Safety Chains
AP4627	1	Cylinder Retract Pressure Line 1/2 X 30 1/2
AP4628	1	Cylinder Extension Pressure Line 1/2 X 30 1/2
POWER UNITS		
MATCH TO APPROPRIATE SIZE UNIT ON SPLITTER		
AP4595		Power Unit 5 HP (See Page MP7521)
AP7027		Power Unit 5 HP IC (See Page MP )
AP5638		Power Unit 8 HP (See Page MP7524)
AP7015		Power Unit 9 HP (See Page MP7527)
H106206	2	HHCS 5/8 UNC X 4 LG GD 5
H116201	4	Hex Nut 5/8 UNC
H191191	1	Cotter Pin 3/16 X 1
H191192	1	Cotter Pin 3/16 X 1.5
P4553	1	Jaw Support Arm
P4538	2	Pin 5/8 Diameter
P4537	1	Axle Pivot Pin
P4523	2	Wear Ring W2-1250-500
P4540	1	Hair Pin Keeper 3/16 X 3 1/2

SEE POWER UNIT DRAWING AND PARTS LIST FOR ADDITIONAL  
COMPONENTS OF MAIN ASSEMBLY.

# CYLINDER AND JAWS ASS'Y



MP7512

03/06/90



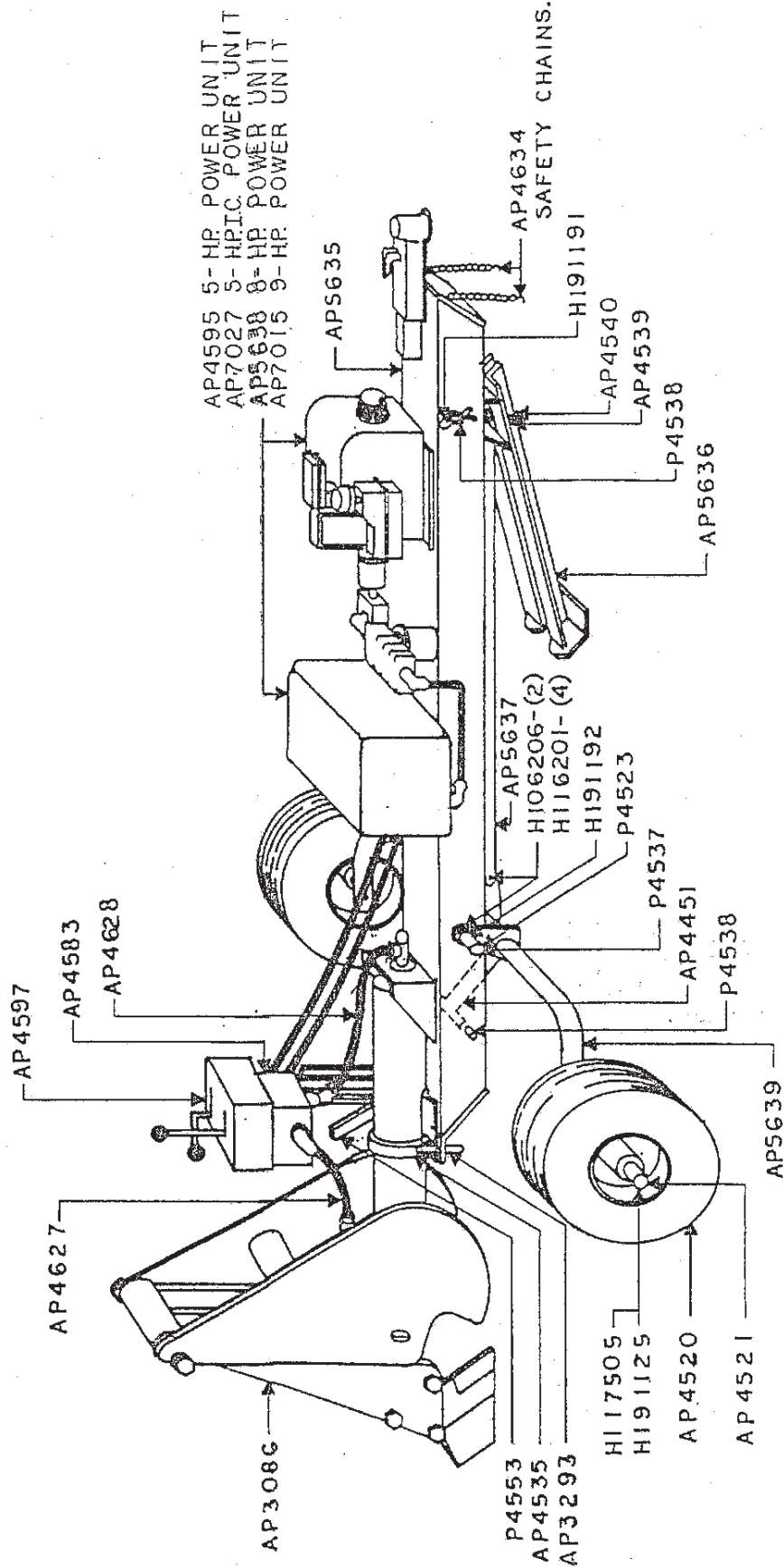
SPLITTER ASSEMBLY  
 LOW LIFT SPLITTER MANUFACTURED BELOW SN. 1388

PART NO	QUANTITY	DESCRIPTION
AP3086	1	Cylinder & Jaws Assembly (See Page MP 7512)
AP4451	1	Lift Cylinder Assembly (See Page MP7514)
AP4583	1	Control Valve Assembly (See Page MP7515)
AP4597	1	Valve Cover & Support
AP4595	1	Power Unit 5 HP (See Page MP7521)
AP4482	1	Main Frame
AP4467	1	Axle Assembly
AP4490	1	Front Leg Support Assembly
AP4520	2	480 X 8 Tire w/ 4 Hole Wheel
AP4521	2	Hub Assembly 4 Bolt w/ Bearings, Seal, and Dust Cap
AP3293	1	"T" Handle
AP4535	1	Cylinder Hold Friction Clamp
AP4739	1	Drag Link
AP4539	1	Leg Support Pin
AP4634	2	Safety Chains
AP4627	1	Cylinder Retract Pressure Line 1/2 X 30 1/2
AP4628	1	Cylinder Extension Pressure Line 1/2 X 30 1/2
H106206	2	HHCS 5/8 UNC X 4 LG GD 5
H116201	4	Hex Nut 5/8 UNC
H191191	1	Cotter Pin 3/16 X 1
H191192	1	Cotter Pin 3/16 X 1.5 PLD
P4553	1	Jaw Support Arm
P4538	2	Pin 5/8 Diameter
P4537	1	Axle Pivot Pin 1 Diameter
P4523	2	Wear Ring W2-1250-500
P4540	1	Hair Pin Keeper 3/16 X 3 1/2

SEE POWER UNIT DRAWING AND PARTS LIST FOR ADDITIONAL  
 COMPONENTS OF MAIN ASSEMBLY.

# SPLITTER ASSY HIGH LIFT

(MANUFACTURED ABOVE SN. NO. 1388)



MP7511

03/10/90

VALVE ASSEMBLY  
(Open Center)

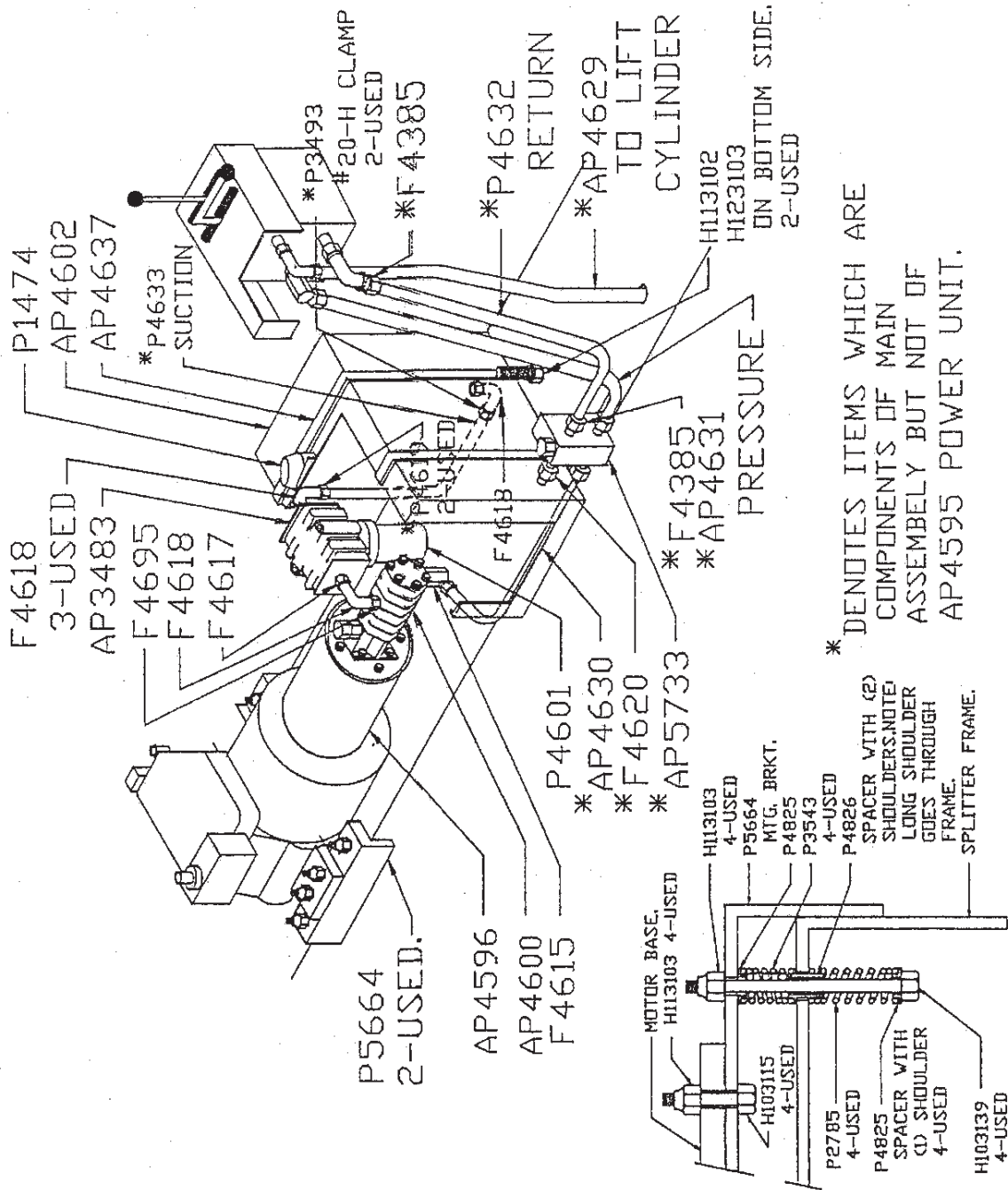
AP4583

PART NO	QUANTITY	DESCRIPTION
P3007	1	Valve Body
P2929	2	End Plate
P3097	1	Pivot Pin 5.75
S-5555-31	2	Snap Ring
H102504	4	HHCS 1/4-20 X 1/2
H122501	4	Lockwasher 1/4
P3068	2	Spacer 1 5/16
P3069	1	Spacer 1 1/2
AP3096	1	Control Lever (Up-Down)
AP3301	1	Control Lever (In-Out)
AP1379	2	Black Knob
F4575	5	Plug 3/8 NPT
F4571	1	Elbow 90° 1/2 NPT SW.
F4572	1	Elbow 45° 1/2 NPT SW.
F4573	1	Elbow 3/8 NPT Black Street
F4581	1	Elbow 1/2 NPT X 3/8 SW.
F4574	1	Reducer 1/2 X 3/8 NPT
AP3799	1	Elbow Restricting
AP3099	3	Plunger Assembly
P3008	3	"O" Ring Plug
03-914-9N	3	"O" Ring
B-006-T	3	Back Up Ring
02-006-7L	3	"O" Ring
P2713	3	Washer Brass .126 ID
P3205	3	Spring Spacer
P3009	3	Valve Seat
B-118-N	3	Back Up Ring
02-118-7N	3	"O" Ring
P2166	3	Spring 1 3/4 LG.
P2532	3	Plunger Guide
P3077	3	Snap Ring
P1217	1	Plunger
P1313	1	Plunger Guide
03-904-9N	1	"O" Ring
02-006-9L	1	"O" Ring
S-5555-12	1	Snap Ring
S-5133-12	1	Snap Ring
P1188	1	Valve Seat 1/8
03-902-9N	1	"O" Ring
P3051	1	Pressure Plug
02-010-7N	1	"O" Ring
B-010-T	1	Back Up Ring
P1142	1	Spring
P1314	1	Spring .37 OD
F1454	1	Plug 4P50N-S
H211125	1	Ball Steel 1/8 DIA GD 25
P1128	1	Spring Spacer
P1142	1	Spring Comp. .23 OD X 1.72

MP

06/29/90

# POWER UNIT ASSEMBLY BRIGGS & STRATTON 5 HP



MOTOR MTG. DETAIL.

MP7521

03/08/90

POWER UNIT  
5 HP BRIGGS & STRATTON

AP4595

PART NO	QUANTITY	DESCRIPTION
AP3484	1	BRIGGS & STRATTON 5 HP Motor
AP4596	1	Clutch & Coupling Assembly
AP4600	1	Pump
AP3483	1	Oil Filter Housing & Filter
AP4602	1	Reservoir 5 GAL.
AP4637	2	Hold Down Bands
F4615	1	90° Elbow 3/4-16 X 3/8 NPT
F4695	1	1 1/16-12 X 3/4 NPT Adapter
F4618	3	Street Elbow 3/4 Black Pipe
F4617	1	Pipe Nipple 3/4
H103115	4	HHCS 5/16-18 X 1 1/2
H123103	8	Lockwasher 5/16 Ext Star
H131031	4	Washer Common 5/16
H113102	8	Hex Nut 5/16-18
P4601	1	Oil Filter
P1474	1	Breather Cap
COMPONENTS OF MAIN ASSEMBLY.		
AP4598	1	Pressure Relief Valve
AP4629	1	Lift Cylinder Line 1/4 X 23 1/2
AP4630	1	Pump Pressure Line 3/8 X 20 1/2
AP4631	1	Valve Pressure Line 3/8 X 23
F4620	1	1/2 Pipe Nipple
F4385	2	3/8 NPT X 1/2 Hose Push-Lok
P4632	1	Return Hose 1/2 ID X 24 1/4
P4633	1	Suction Hose 1 ID X 18
P4619	2	3/4 NPT X 1 Hose Barbed Fit.

MP

06/29/90



POWER UNIT  
5 HP BRIGGS & STRATTON IC

AP7027

PART NO	QUANTITY	DESCRIPTION
AP5098	1	BRIGGS & STRATTON 5 HP IC Motor
AP4596	1	Clutch & Coupling Assembly
AP4600	1	Pump
AP 3483	1	Oil Filter Housing & Filter
AP4602	1	Reservoir 5 GAL.
AP4637	2	Hold Down Bands
F4615	1	90° Elbow 3/4-16 X 3/8NPT
F4695	1	1 1/16-12 X 3/4 NPT Adapter
F4618	3	Street Elbow 3/4 Black Pipe
F4617	1	3/4 Pipe Nipple
H103115	4	HHCS 5/16-18 X 1 1/2
H123103	8	Lockwasher 5/16 Ext Star
H131031	4	Washer Common 5/16
H113102	8	Hex Nut 5/16-18
P4601	1	Oil Filter
P1474	1	Breather Cap

COMPONENTS OF MAIN ASSEMBLY

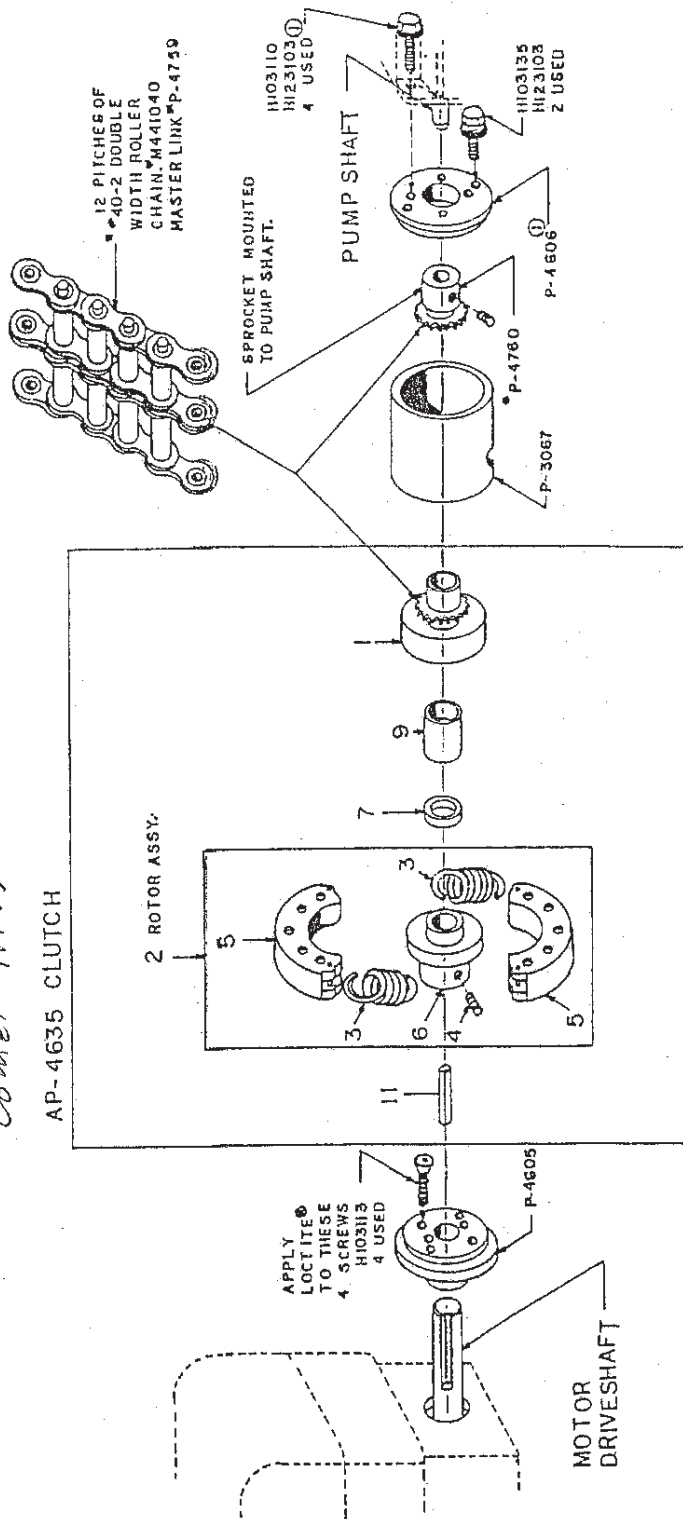
AP4598	1	Pressure Relief Valve
AP4629	1	Lift Cylinder Line 1/4 X 23 1/2
AP4630	1	Pump Pressure Line 3/8 X 20 1/2
AP4631	1	Valve Pressure Line 3/8 X 23
F4620	1	1/2 Pipe Nipple
F4385	2	3/8 NPT X 1/2 Hose Push-Lok
P4632	1	Return Hose 1/2 ID X 24 1/4
P4633	1	Suction Hose 1 ID X 18
P4619	2	3/4 NPT X 1 Hose Barbed Fit.

MP

06/29/90

# CLUTCH & COUPLING ASS'Y 5 HP ENGINE

*From Midwest Engine Ware house  
Comet #71137*



NOTE: CLUTCH PART NUMBERS ON  
ENCLOSED SHEET.

\* SOME MODELS USE #35-2 (441035)  
ROLLER CHAIN, P4622 MASTER LINK,  
AND #35 12 TOOTH (4621) SPROCKET.

MP7522

03/13/90

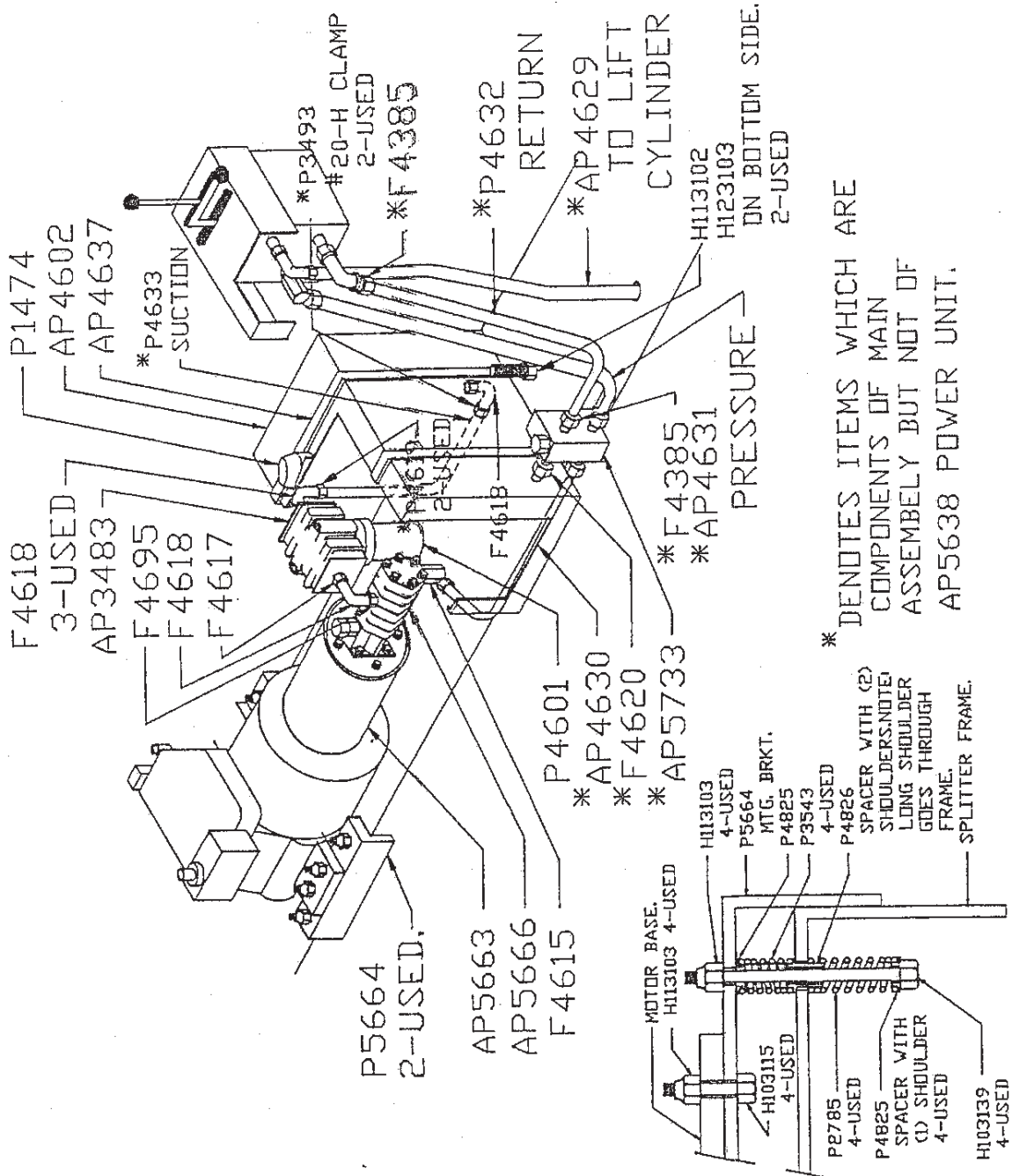


CLUTCH & COUPLING ASSEMBLY  
 5 HP BRIGGS & STRATTON ENGINE  
 5 HP BRIGGS & STRATTON IC ENGINE

AP4596

PART NO	QUANTITY	DESCRIPTION
AP4635	1	Centrifical Clutch
H103113	4	FSHCS 5/16-24 X 1
H103110	4	HHCS 5/16-18 X 1
H103135	2	HHCS 5/16-18 X 3 1/2
H123103	6	Lockwasher 5/16 Ext Star
P4605	1	Clutch Housing Motor End
P4606	1	Clutch Housing Pump End
P3067	1	Clutch Housing Cover
Option 1 — AP4760	1	12 Tooth #40 Sprocket 7/18 Bore
Option 1 — P4759	1	Master Link For #40-2 Chain
Option 1 — M441040	1	#40-2 Double Width Roller Chain 12 Pitches
Option 2 — P4622	1	Master Link For #35-2 Chain
Option 2 — P4621	1	12 Tooth #35 Sprocket 7/16 Bore
Option 2 — M441035	1	#35-2 Double Width Roller Chain 12 Pitches

# POWER UNIT ASSEMBLY BRIGGS & STRATTON 8 HP



\* DENOTES ITEMS WHICH ARE COMPONENTS OF MAIN ASSEMBLY BUT NOT OF AP5638 POWER UNIT.

MOTOR MTG. DETAIL.

MP 7524

03 / 26 / 90

POWER UNIT  
8 HP BRIGGS & STRATTON

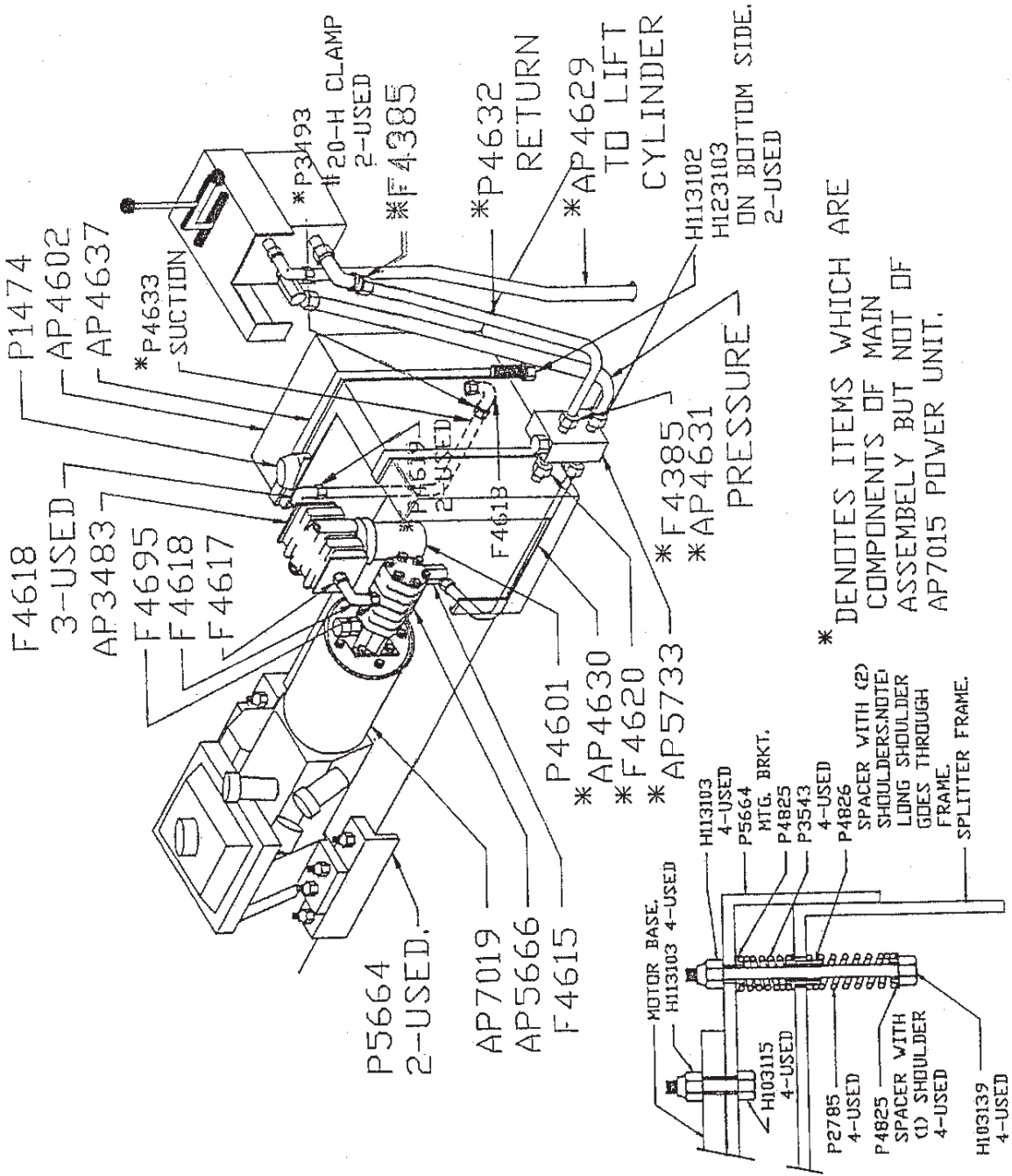
AP5638

PART NO	QUANTITY	DESCRIPTION
AP5623	1	BRIGGS & STRATTON 8 HP Motor
AP5663	1	Clutch & Coupling Assembly
AP5666	1	Pump
AP4602	1	Reservoir 5 GAL.
AP3483	1	Oil Filter Housing & Filter
AP4637	2	Hold Down Bands
H103115	4	HHCS 5/16-18 X 1 1/2
H123103	8	Lockwasher 5/16 Ext. star
H131031	4	Washer Common 5/16
H113102	8	Hex Nut 5/16-18
F4615	1	90° Elbow 3/4-16 X 3/8 NPT
F4695	1	1 1/16-12 X 3/4 NPT Adapter
F4618	3	Street Elbow 3/4 Black Pipe
F4617	1	3/4 Pipe Nipple
P4601	1	Oil Filter
P1474	1	Breather Cap
COMPONENTS OF MAIN ASSEMBLY		
AP4598	1	Pressure Relief Valve
AP4629	1	Lift Cylinder Line 1/4 X 23 1/2
AP4630	1	Pump Pressure Line 3/8 X 20 1/2
AP4631	1	Valve Pressure Line 3/8 X 23
F4620	1	1/2 Pipe Nipple
F4385	2	3/8 NPT X 1/2 Hose Push-Lok
P4632	1	Return Hose 1/2 ID X 24 1/4
P4633	1	Suction Hose 1 ID X 18
P4619	2	3/8 NPT X 1 Hose Barbed Fitting

MP

06/29/90

# POWER UNIT ASSEMBLY BRIGGS & STRATTON 9 HP



\* DENOTES ITEMS WHICH ARE COMPONENTS OF MAIN ASSEMBLY BUT NOT OF AP7015 POWER UNIT.

MOTOR MTG. DETAIL.

MP7527

03 / 23 / 90

POWER UNIT  
**9** HP BRIGGS & STRATTON  
 AP7015

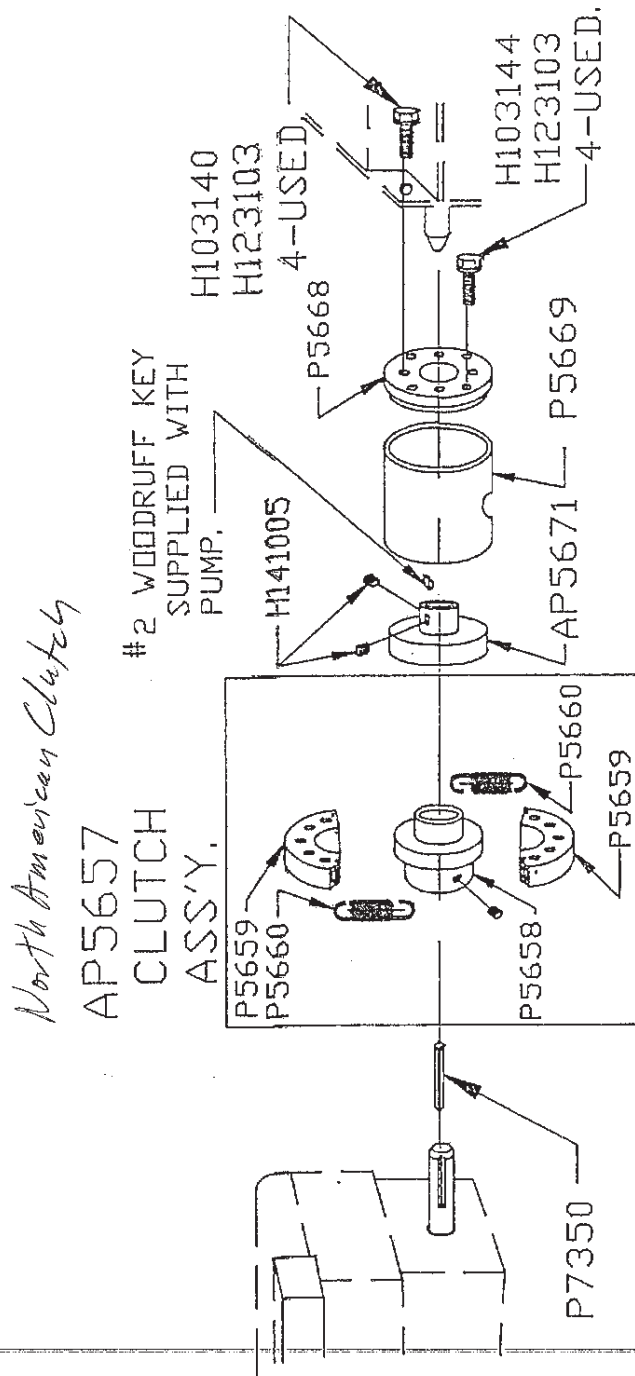
PART NO	QUANTITY	DESCRIPTION
AP6999	1	BRIGGS & STRATTON 9 HP Motor
AP7019	1	Clutch & Coupling Assembly
AP5666	1	Pump
AP3483	1	Oil Filter Housing & Filter
AP4602	1	Reservoir 5 GAL.
AP4637	2	Hold Down Bands
H103115	4	HHCS 5/16-18 X 1 1/2
H123103	8	Lockwasher 5/16 Ext Star
H131031	4	Washer Common 5/16
H113102	8	Hex Nut 5/16-18
F4615	1	90° Elbow 3/4-16 X 3/8 NPT
F4695	1	1 1/16-12 X 3/4 NPT Adapter
F4618	3	Street Elbow 3/4 Black Pipe
F4617	1	3/4 Pipe Nipple
P4601	1	Oil Filter
P1474	1	Breather Cap
COMPONENTS OF MAIN ASSEMBLY		
AP4598	1	Pressure Relief Valve
AP4629	1	Lift Cylinder Line 1/4 X 23 1/2
AP4630	1	Pump Pressure Line 3/8 X 20 1/2
AP4631	1	Valve Pressure Line 3/8 X 23
F4620	1	1/2 Pipe Nipple
F4385	2	3/8 NPT X 1/2 Hose Push-Lok
P4632	1	Return Hose 1/2 ID X 24 1/4
P4633	1	Suction Hose 1 ID X 18
P4619	2	3/4 NPT X 1 Hose Barbed Fitting

MP

06/29/90



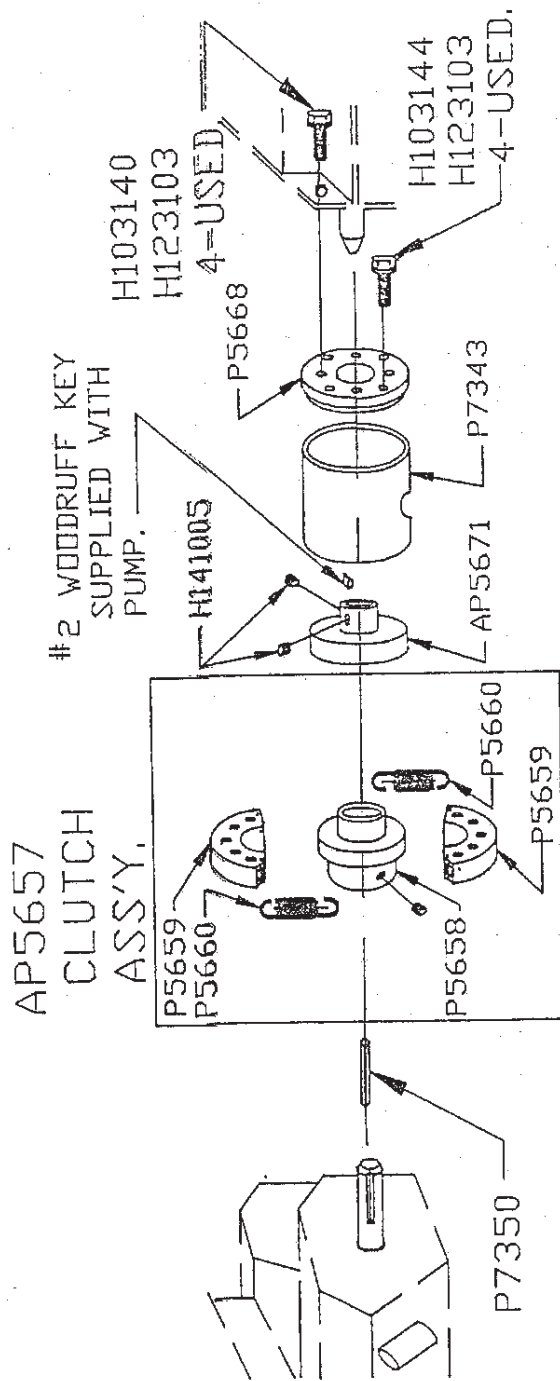
# CLUTCH & COUPLING ASSY. 8 HP ENGINE



MP7525

03-13-90

# CLUTCH & COUPLING ASSY. 9 HP ENGINE.



MP7528

03-12-90



CLUTCH & COUPLING ASSEMBLY  
8 HP BRIGGS & STRATTON ENGINE

AP5663

PART NO	QUANTITY	DESCRIPTION
AP5657	1	Centrifical Clutch
P7350	1	Key .25 X 1.25
P5669	1	Clutch Housing Cover
P5668	1	Clutch Housing Pump End
H103140	4	HHCS 5/16-18 X 3/4 PLD
H103144	4	HHCS 5/16-24 X 5
H123103	8	Lockwasher 5/16 Ext Star

CLUTCH & COUPLING ASSEMBLY  
9 HP BRIGGS & STRATTON ENGINE

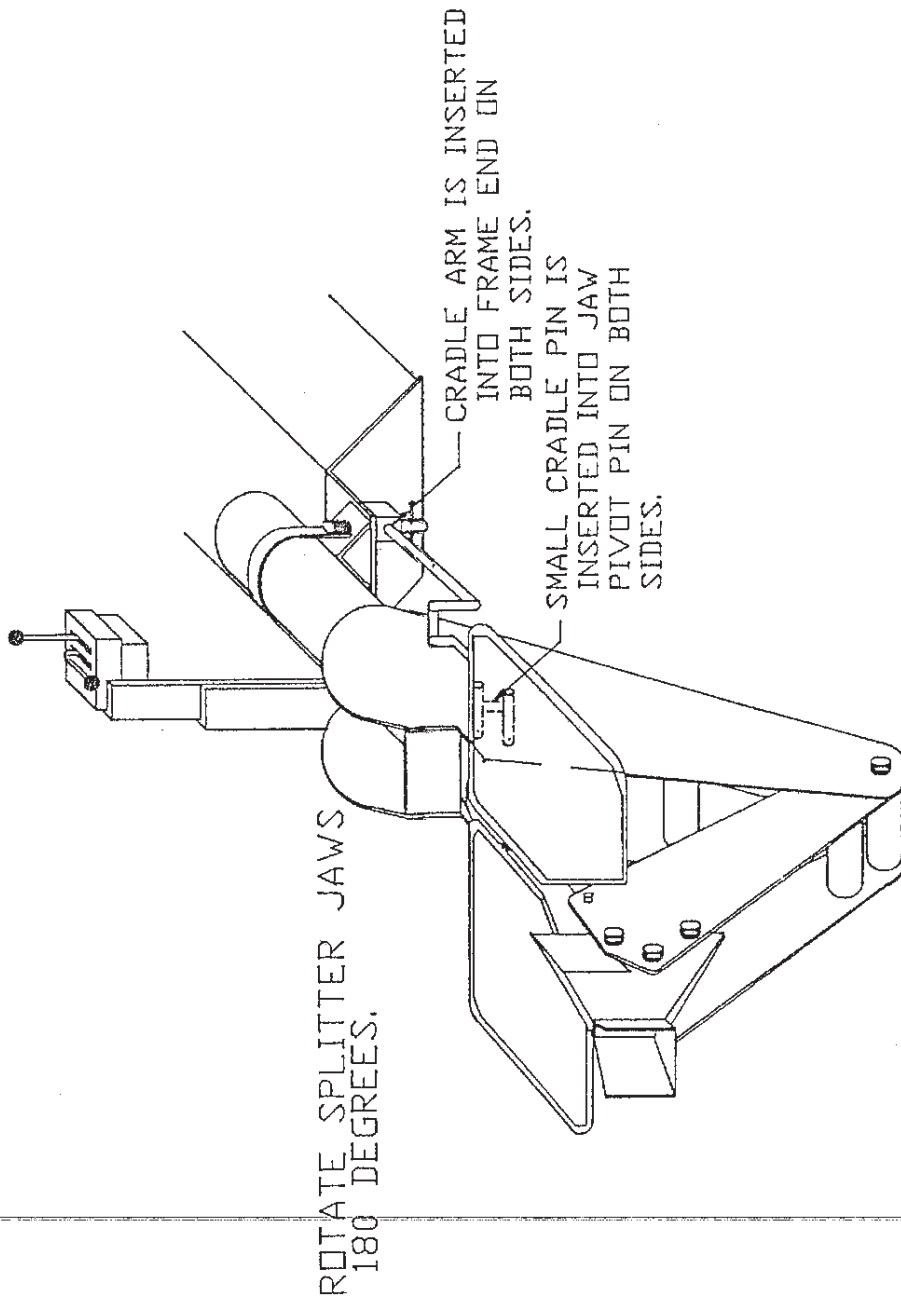
AP7019

PART NO	QUANTITY	DESCRIPTION
AP5657	1	Centrifical Clutch
P7350	1	Key .25 X 1.25
P7343	1	Clutch Housing Cover
P5668	1	Clutch Housing Pump End
H103140	4	HHCS 5/16-18 X 3/4 PLD
H103144	2	HHCS 5/16-24 X 5
H123103	8	Lockwasher 5/16 Ext Star

HWH LOG CRADLE KIT #AP7000

OPTIONAL ATTACHMENT FOR USE WITH HWH LOG SPLITTER.

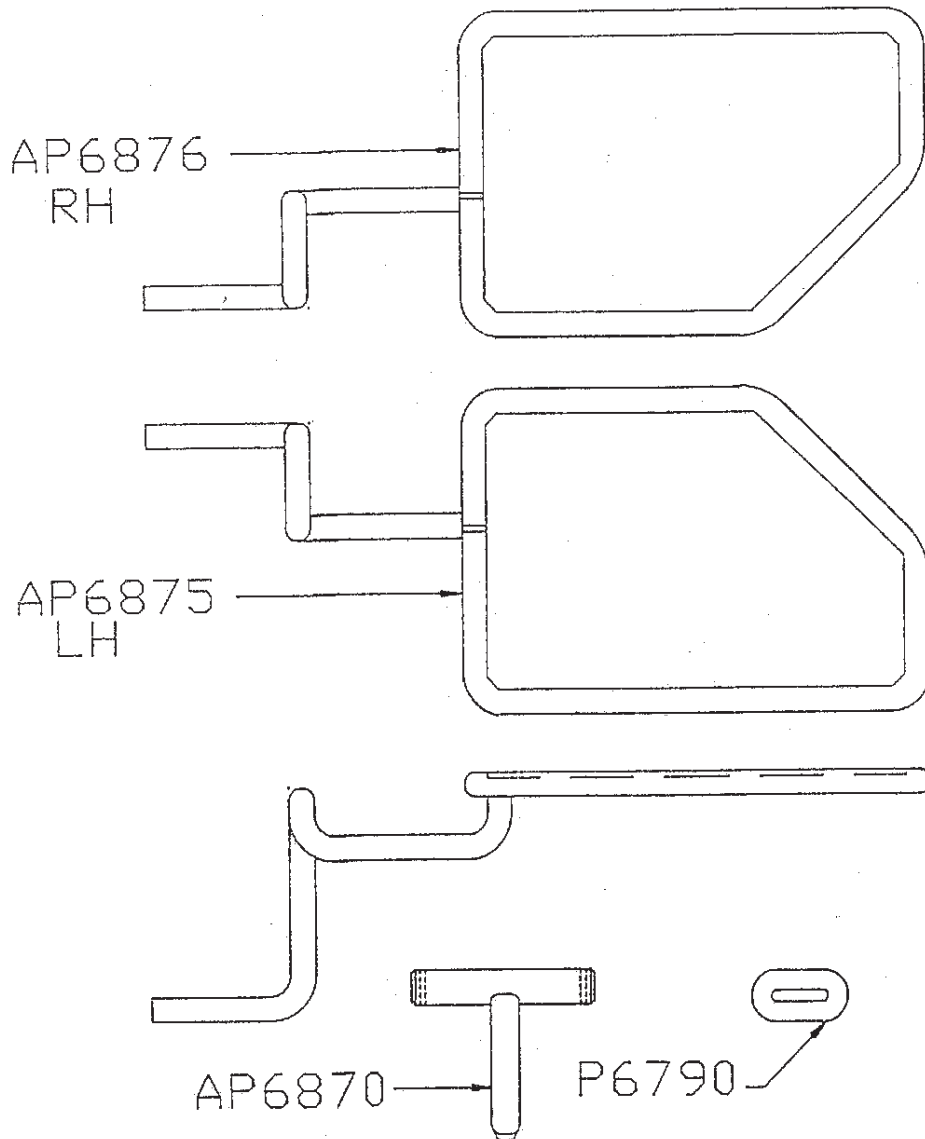
# LOG SPLITTER CRADLE MTG. INSTRUCTIONS



MP7519

03/21/90

# SPLITTER LOG CRADLE KIT



MP7520

03/14/90

## LOG SPLITTER CRADLE KIT

AP7000

PART NO	QUANTITY	DESCRIPTION
AP6870	2	Cradle Pin Assembly
AP6875	1	Cradle Assembly Left Hand
AP6876	1	Cradle Assembly Right Hand
P6790	4	Log Cradle Support
H131062	4	Washer Common 5/8 PLD
H191125	4	Pin Cotter 1/8 X 1 1/4

