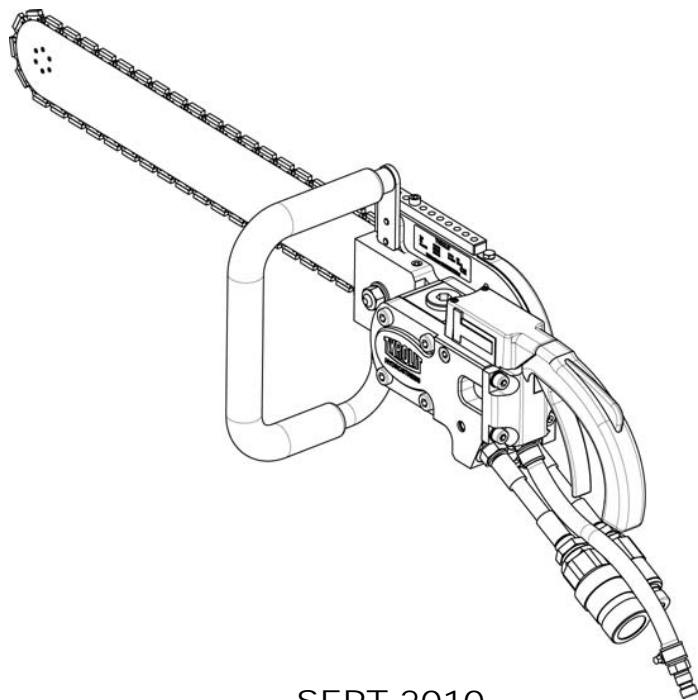


DIAMOND PRODUCTS

CHAINSAW HCH50 ASSEMBLY MANUAL



SEPT 2010

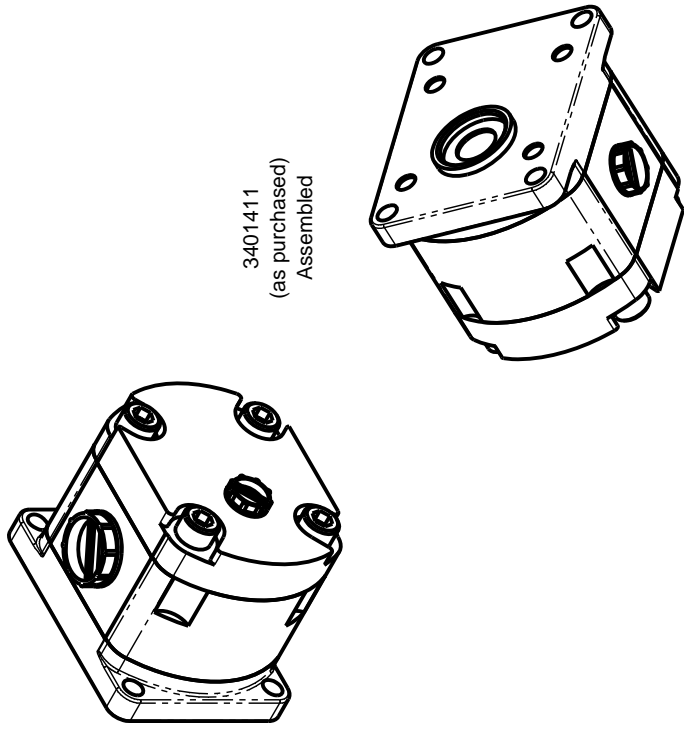
HCH-50 Chain Saw

Hydraulic Motor Subassembly

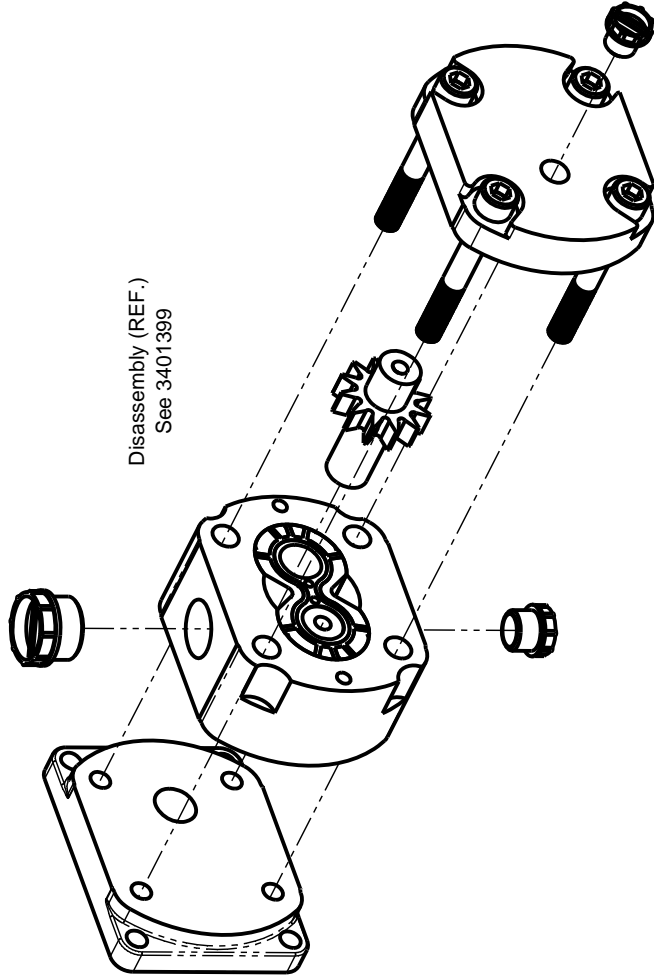
3401411

REVISION TABLE

REV	DATE	DESCRIPTION	BY



Disassembly (REF.)
See 3401399



Supplier:
HPI (Hydroperfect International)
Model #M3BAN2008FL10B02N

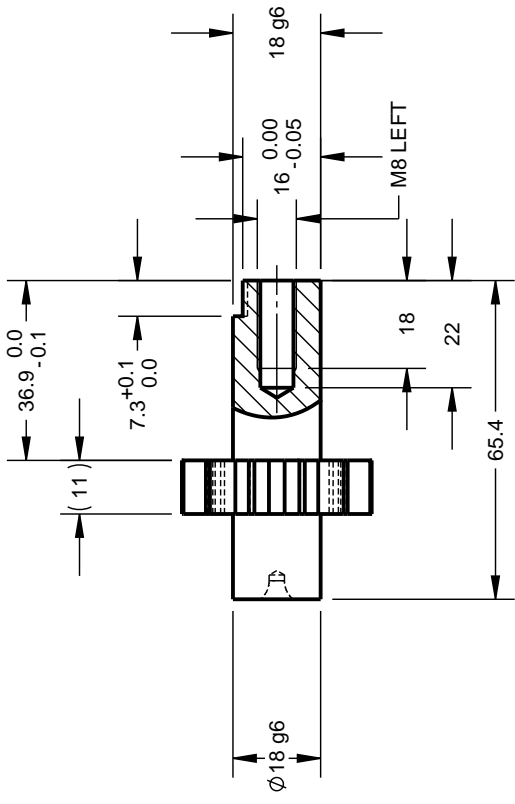
METRIC SIZE RANGE TOLERANCES	>0-6	±0.1	DIAMOND PRODUCTS ELYRIA, OHIO
	>6-30	±0.2	
	>30-120	±0.3	
	>120-400	±0.5	
>400-1000	±0.8		
ANGULAR ±1°		NAME: Motor Hyd. HCH50 8CCM	
FINISH: As Purchased		MATL: HPI GR2 8CCM Hyd. Motor	
DWN. BY: DN	SCALE: 1:2	PART NO: 3401411	REV. NO: -
SHEET: 1 OF 1	DATE: 5/21/2009	DWG. NO: 3401411	

METRIC

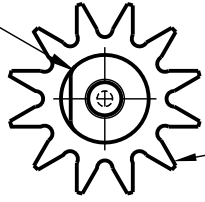
3401410

REVISION TABLE

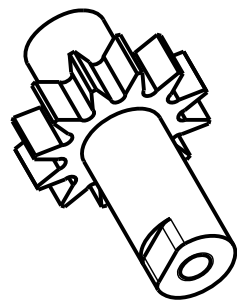
REV	DATE	DESCRIPTION	BY



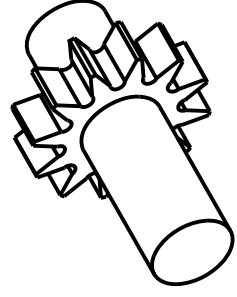
R3^{+0.2}_{-0.1}(2X)



Tooth profile represented symbolically only



3401410 as modified



3401410 as purchased

N8/

Break Sharp Edges

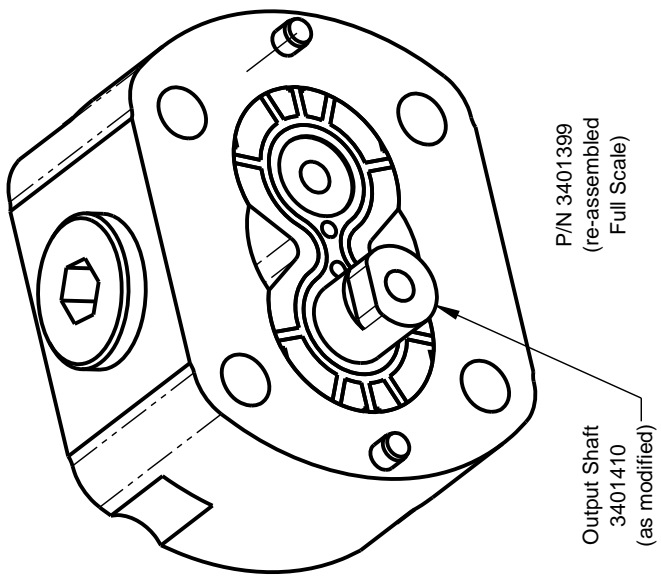
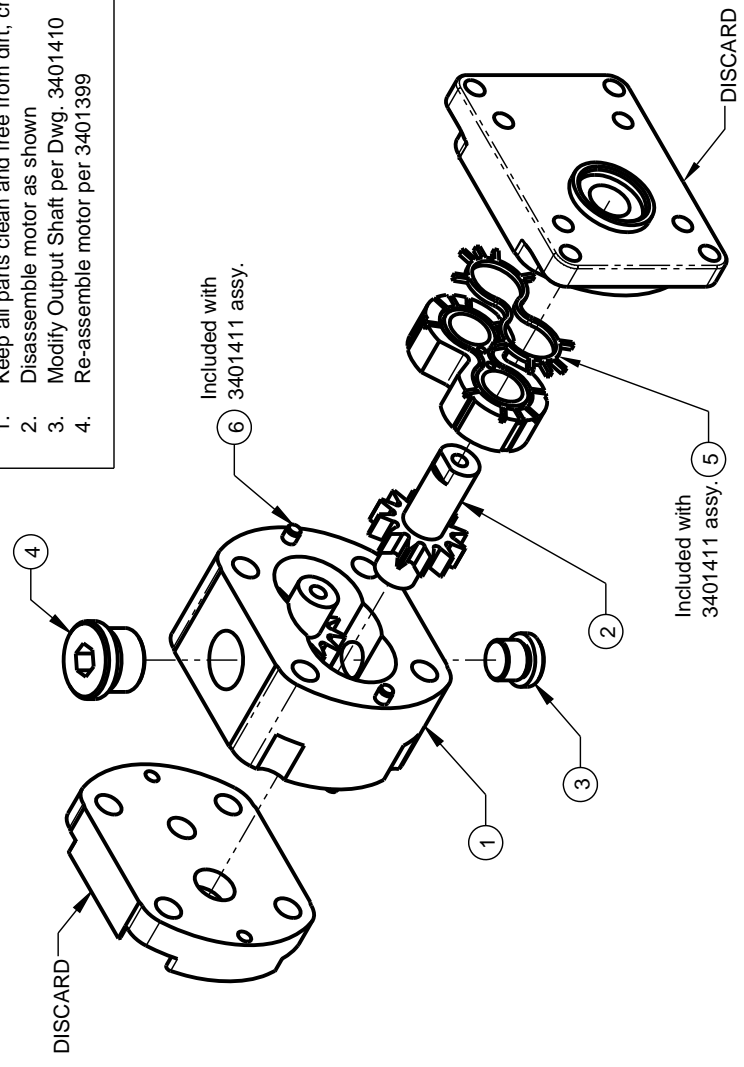
DIAMOND PRODUCTS ELYRIA, OHIO		NAME: Shaft, Motor Output, HCH50 MATL: Steel - As Part of Assembly FINISH:	REV. NO.: -
METRIC SIZE RANGE TOLERANCES >0-6 ±0.1 >6-30 ±0.2 >30-120 ±0.3 >120-400 ±0.5 >400-1000 ±0.8	ANGULAR ±1°	SCALE: 1:1 DATE: 6/12/99	PART NO.: 3401410 DWG. NO.: 3401410
DWN. BY: MI	SHEET: 1 OF 1	SCALE: 1:1 DATE: 6/12/99	PART NO.: 3401410 DWG. NO.: 3401410

METRIC

3401399

REVISION TABLE		
REV	DATE	DESCRIPTION

Modification to Hydraulic Motor 3401411:
 Keep all parts clean and free from dirt, chips, etc.
 1. Disassemble motor as shown
 2. Modify Output Shaft per Dwg. 3401410
 3. Re-assemble motor per 3401399



ITEM	PART NO.	Standard/ QTY.	DESCRIPTION
1	3401411	1	Motor Hyd. HCH50 8CCM
2	3401410	1	Shaft, Motor Output, HCH50
3	3401413	1	Screw, Clasp G3/8 zyl.
4	3401414	1	Screw, Clasp G3/4 zyl.
5	3401412	1	Gasket, Hydraulic Motor
6	2900888	4	Dowel Pin M6x16 BN855

METRIC SIZE RANGE TOLERANCES		DIAMOND PRODUCTS ELYRIA, OHIO	
>0-6	±0.1	NAME:	Hyd. Motor GR2 8CCM - HCH50 Saw
>6-30	±0.2	MATL:	HPI GR2 8CCM Hydraulic Motor
>30-120	±0.3	FINISH:	None
>120-400	±0.5	DWN. BY:	MI
>400-1000	±0.8	SCALE:	1:2
SHEET: 1 OF 1		DATE:	5/20/2009
PART NO:		3401399	REV. NO:
DWG. NO:		3401399	-

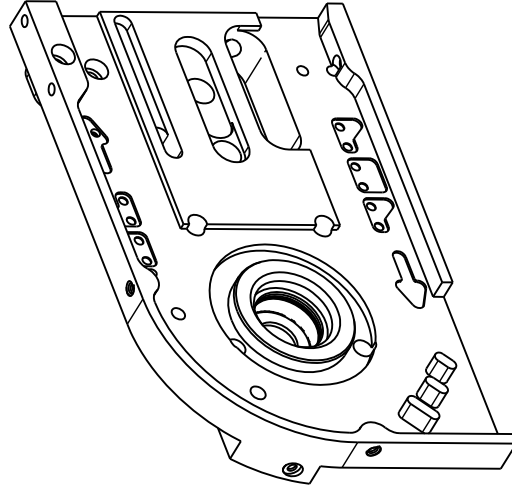
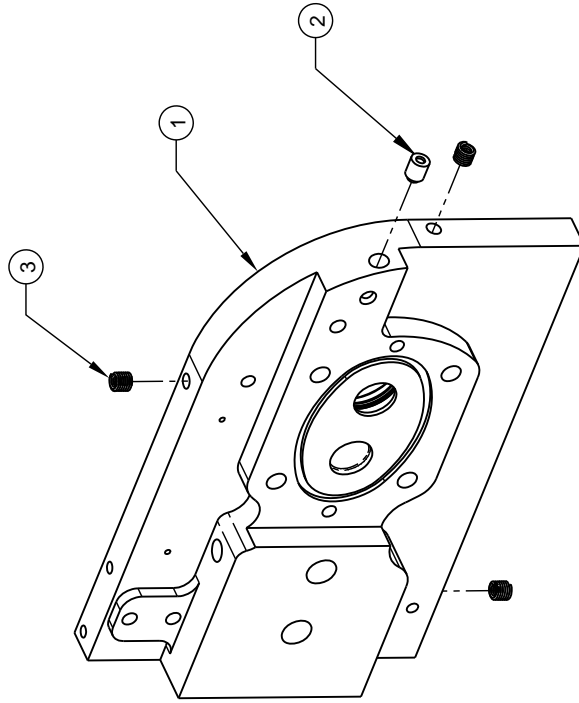
METRIC

HCH-50 Chain Saw
Saw Frame Subassembly

3401408


REVISION TABLE

REV	DATE	DESCRIPTION	BY

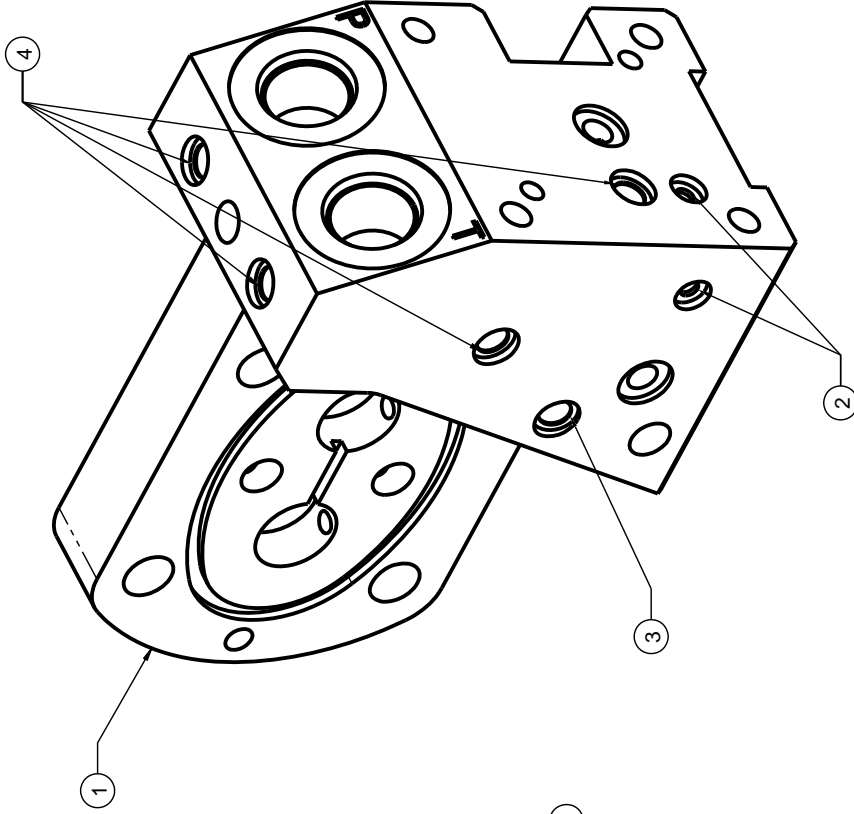
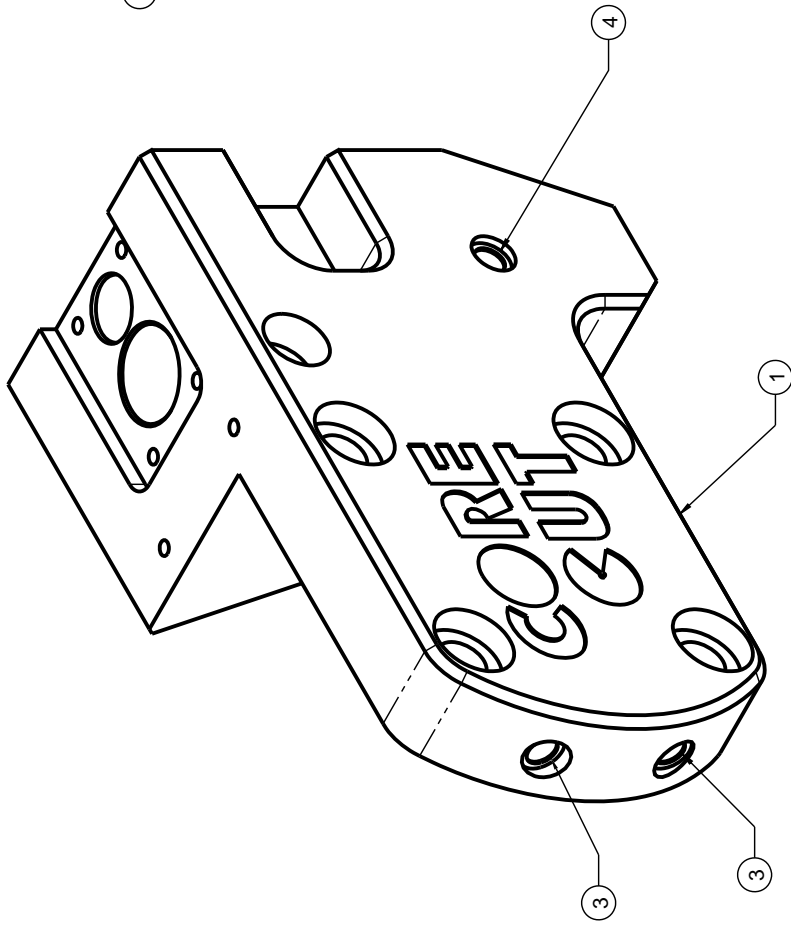


ITEM	PART NO.	QTY.	DESCRIPTION
1	2504789	1	Chain Saw Frame, HCH50
2	3202340	1	Plug, Expander 8MM, Std.
3	2900906	3	M6 x1.0 Helicoil Insert

METRIC

 DIAMOND PRODUCTS ELYRIA, OHIO	
METRIC SIZE RANGE TOLERANCES >0-6 ±0.1 >6-30 ±0.2 >30-120 ±0.3 >120-400 ±0.5 >400-1000 ±0.8	NAME: Chain Saw Frame Assy, HCH50 MAT'L: FINISH:
ANGULAR ±1°	SCALE: 1:2 DATE: 6/4/2009
DWN. BY: MI	PART NO: 3401408 DWG. NO: 3401408
SHEET: 1 OF 1	REV. NO: -

3401401



ITEM	PART NO.	Standard/ QTY.	DESCRIPTION
1	2504783	1	Valve Body HCH50
2	3202340	2	Plug, Expander 8MM, Std.
3	3202341	3	Plug, Expander 10MM, Long
4	3202342	5	Plug, Expander 10MM, Std

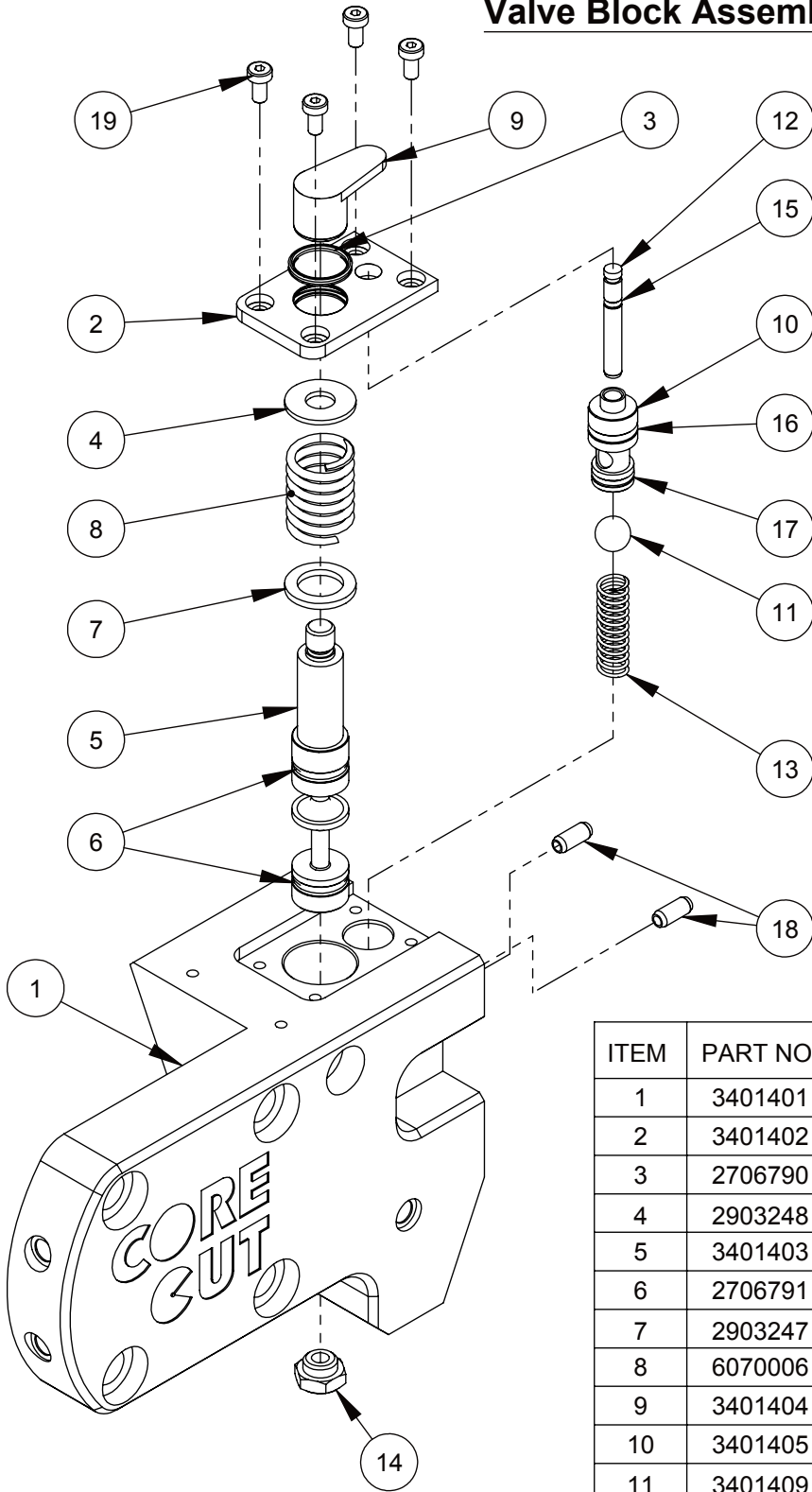
DIAMOND PRODUCTS ELYRIA, OHIO		Valve Body	
METRIC SIZE RANGE TOLERANCES		NAME:	MATL:
>0-6	±0.1	ANGULAR ±1°	
>6-30	±0.2		
>30-120	±0.3		
>120-400	±0.5		
>400-1000	±0.8		
DWN. BY: MI	SCALE: 1:1	DATE: 4/20/2009	PART NO: 3401401
SHEET: 1 OF 1		DATE: 4/20/2009	DWG. NO: 3401401
			REV. NO: 1

METRIC

HCH-50 Chain Saw

Hydraulic Valve Body Subassembly

Valve Block Assembly #3401398

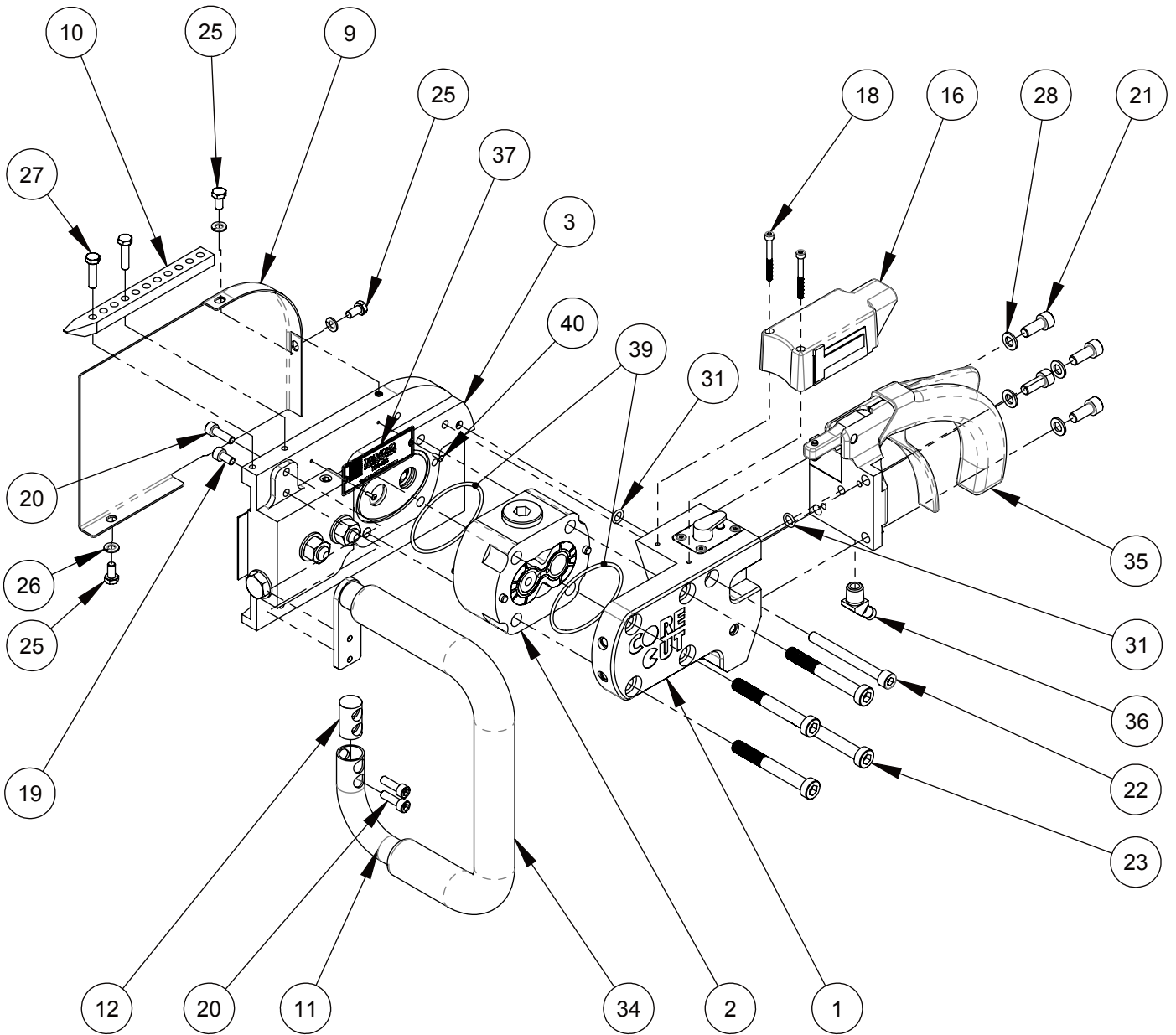


ITEM	PART NO.	QTY	DESCRIPTION
1	3401401	1	Valve Body HCH50
2	3401402	1	Valve Cap
3	2706790	1	X-Ring 15.6x1.78
4	2903248	1	Washer 20MM x 8MM x 1.5MM
5	3401403	1	Slidegate Valve
6	2706791	2	X-Ring 10.77x2.62
7	2903247	1	Washer M12 20MM x 13MM x 2MM
8	6070006	1	Spring, Compression 34 x 19.1 x 2.4
9	3401404	1	Beam, HCH50 Valve Body
10	3401405	1	Plug Valve
11	3401409	1	Ball, Steel 10mm HCH50
12	3401406	1	Needle Valve
13	6070007	1	Spring, Compression 8x1/40.5 HCH50
14	3201998	1	Breather G1/8 HCH50 Valve Body
15	2706792	1	O-Ring 2x1.5 N70
16	2706793	1	O-Ring 10x2.0 N70
17	2706794	1	O-Ring 9.0x1.5 N70
18	2706795	2	Roll Pin 5x12 ISO8748 BN876
19	2900761	4	Cap Screw, Soc. Hd., M4 x 8 Low head

HCH-50 Chain Saw

Final Saw Assembly

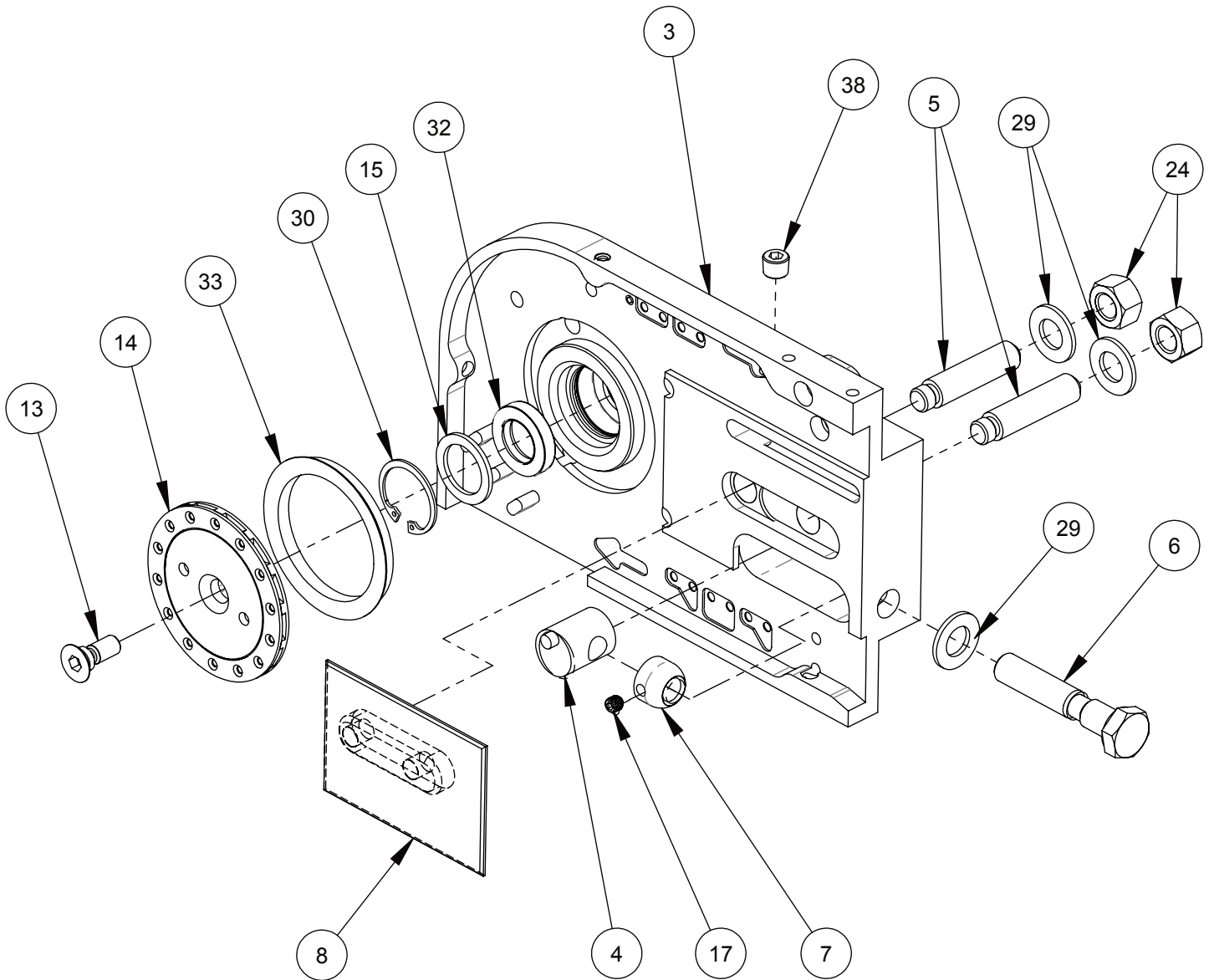
3401281 Assembly
View 1



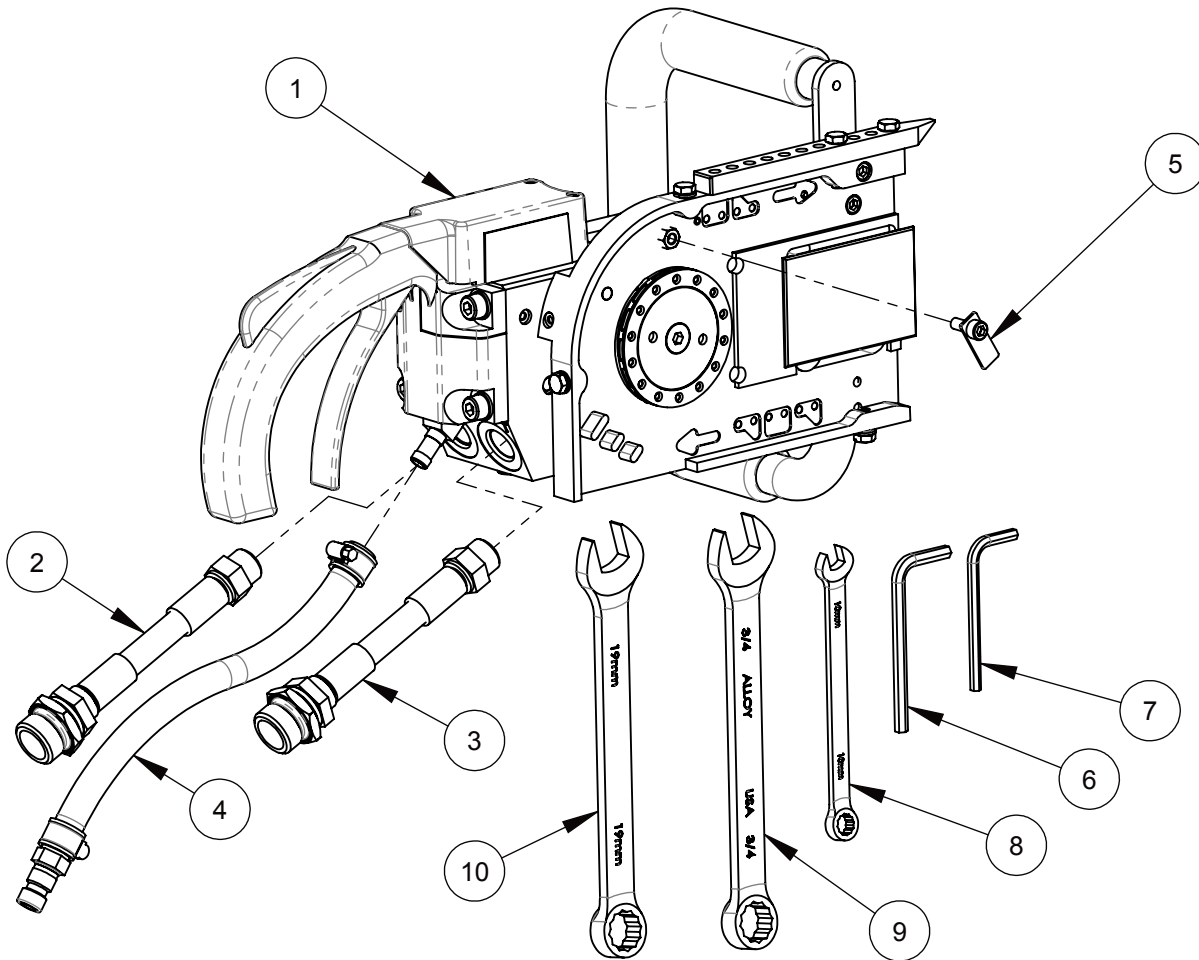
3401281 Parts List

BOM Table			
ITEM	PART NO.	QTY.	DESCRIPTION
1	3401398	1	Valve Body HCH50
2	3401399	1	Hyd. Motor GR2 8CCM - HCH50 Saw
3	3401408	1	Chain Saw Frame Assy, HCH50
4	3401013	1	Tensioning Nut
5	3401018	2	Bolt to Chain Bar
6	3401015	1	Tensioning Screw
7	3401014	1	Nut, Counter
8	3401017	1	Chain Bar Plate
9	3401287	1	Chain Guard
10	3402177	1	Cutting Mandrel
11	3401010	1	Handle (Weldment)
12	3401392	1	Clamp Piece
13	3401152	1	Screw M8 LEFT x 22
14	3401376	1	Drive Sprocket, Chain Saw
15	3401407	1	Seal Back Up Ring
16	3401011	1	Spirit Level
17	3401016	1	Set Screw, M6 x 6
18	3400549	2	Cap Screw, Soc. Hd., M4 x 35
19	3402011	1	Cap Screw, Soc. Hd., M6 x 16
20	2900554	3	Cap Screw, Soc. Hd., M6 x 20
21	2900243	4	Cap Screw, Soc. Hd., M8 x 20
22	2903249	1	Cap Screw, Soc. Hd., M8 x 80
23	2900666	4	Cap Screw, Soc. Hd., M10 x 80 Low Head
24	2900482	2	Hex Nut, M12
25	2900544	3	Cap Screw, Hex Hd., M6 x 12
26	2900765	3	Lock Washer, M6 Split
27	2900311	2	Cap Screw, Hex Hd., M6 x 25
28	2903233	4	Washer M8 15/8.4/1.6
29	3403010	3	M12 Flat Washer
30	2704957	1	Ring, Retaining, Int 30mm
31	3401400	2	O-Ring 8.0x2.0 N70
32	3401295	1	Seal, Motor Shaft
33	3400837	1	Seal,CSF40 Sprocket
34	3401418	1	Grip, Handle
35	6048784	1	Rear Handle Kit
36	3201739	1	1/4"M. Pipe to 3/8" Hose Barb 45 Deg
37	1800169	1	DP S/N Nameplate
38	3401417	1	Screw, Locking
39	3401416	2	O-ring, M2.62 x 66.35
40	2900053	2	Rivet, 3/32" Dia.

3401281 Assembly
View 2



HCH50 Chainsaw Assembly 5801010



BOM Table			
ITEM	PART NO.	QTY.	DESCRIPTION
1	3401281	1	Chainsaw HCH50
2	6044000	1	Inlet Hydraulic Tube Assy.
3	6044001	1	Outlet Hydraulic Tube Assy.
4	6048644	1	Water Hose Assy.
5	3401077	1	Sprocket Lock Tool Assy.
6	2500360	1	Key, 6MM Hex
7	2500359	1	Key, 5MM Hex
8	2400221	1	10MM Combo Wrench 12 Point
9	2400146	1	Wrench, 3/4" Combination
10	2505036	1	19MM Combo Wrench 12 Point



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