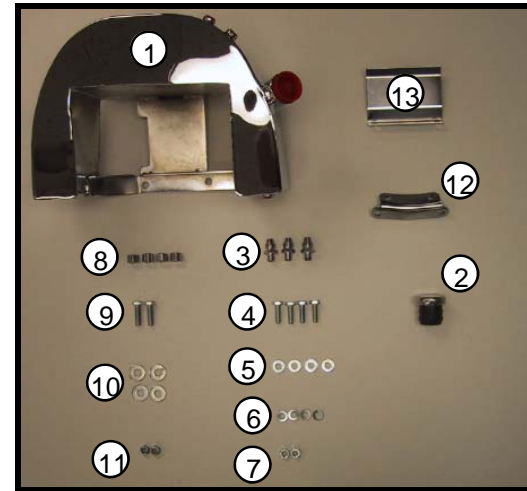


PAN HEAD ELECTRIC START KIT SWINGARM OIL TANK INSTALLATION INSTRUCTIONS



BILL OF MATERIALS		
ITEM	DESCRIPTION	QTY
1	CHROME TANK	1
2	FILL PLUG	1
3	NPT HOSE FITTING	3
4	5/16 X 1" HEX BOLT	4
5	5/16 FLAT WASHER	4
6	5/16 LOCK WASHER	4
7	5/16 HEX NUTS	2
8	OIL TANK SPACER	4
9	5/16-24 X1" HEX BOLT	2
10	5/16 FLAT WASHER	4
11	5/16-24 LOCK NUT	2
12	TANK FENDER BRKT.	1
13	BATTERY HOLD PLT.	1

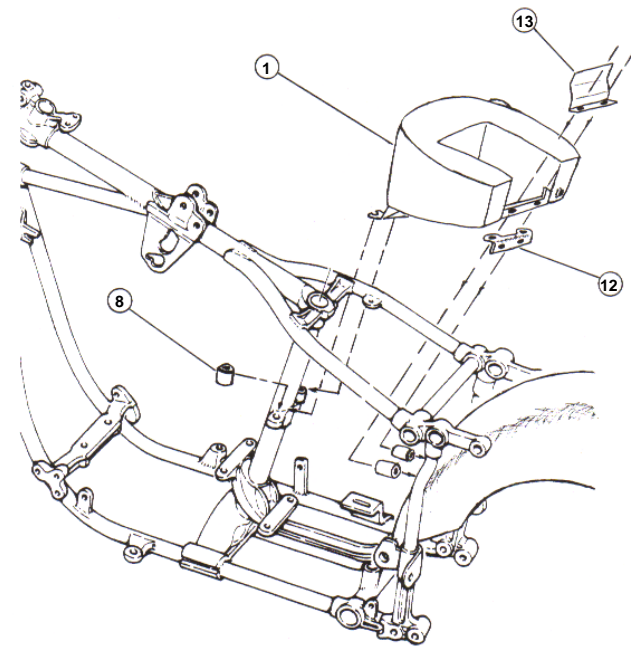
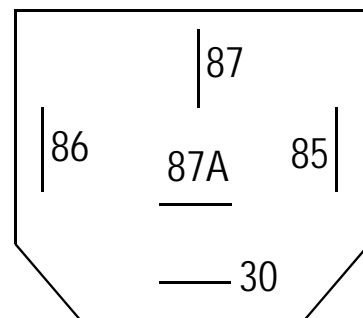


FIGURE 1

1. REMOVE STOCK TANK ASSY.
2. USING ITEMS #4, #5, #6, #7 AND #8, MOUNT TANK, ITEM #1 TO SEAT POST MOUNTS AND ATTACH ITEMS #12 AND #13 TO TANK AS SHOWN IN FIGURE #1.
3. USING 11/32" DIAMETER DRILL, DRILL (2) HOLES IN REAR FENDER IN LINE WITH ITEM #12.
4. PLACE ITEM #8 BETWEEN ITEM #12 AND REAR FENDER AND ATTACH TANK ASSEMBLY TO REAR FENDER USING ITEMS #9, #10 AND #11 AS SHOWN IN FIGURE #1.
5. CONNECT OIL LINES USING ITEM #3.

PAN HEAD ELECTRIC START KIT WIRING DIAGRAM



Standard Starter Relay

- Terminal #30 - To 12V Power w/Fuse
- Terminal #85 - To Ground
- Terminal #86 - To Starter Button
- Terminal #87 - To Solenoid Switch Terminal
- Terminal #87A - Unused



PAN HEAD ELECTRIC START KIT



- KITS AVAILABLE FOR USE ON RIGID OR SWINGARM FRAME APPLICATIONS .
- KITS CAN BE USED WITH OR WITHOUT TIN PRIMARY COVERS. SOME MODIFICATIONS NECESSARY IF USING TIN COVERS. SEE PICTURE BELOW.
- STANDARD KIT INCLUDES MOUNTING PLATES, NOSE CONE SUPPORT ASSEMBLY, RING GEAR AND ADAPTER AND HIGH TORQUE GEAR REDUCTION STARTER (EVO STYLE).
- KIT CAN BE USED WITH SOME EXISTING BELT DRIVES OR TECH CAN SUPPLY A 1 1/2" OR 3" BELT DRIVE SYSTEM WITH YOUR KIT.
- KIT REQUIRES THE USE OF AN ELECTRIC START OIL TANK AND A 12V LOW PROFILE BATTERY BOTH OF WHICH ARE AVAILABLE FROM TECH.



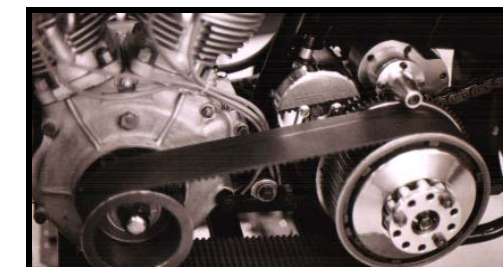
MODIFICATIONS TO TIN PRIMARY COVERS INCLUDE CLEARANCE ON THE INNER COVER FOR THE RING GEAR AS SHOWN AS WELL AS CLEARANCE ON THE OUTER COVER FOR THE NOSE CONE SHAFT SUPPORT ASSEMBLY AS SHOWN IN THE CIRCLED AREA.



KIT SHOWN WITH 1 1/2" BELT DRIVE WITH PRO-CLUTCH, CHROME ELECTRIC START OIL TANK AND MODIFIED INNER TIN PRIMARY COVER.



COMPLETE INSTALLATION SHOWING NOSE CONE SHAFT SUPPORT ASSEMBLY AS WELL AS MODIFIED OUTER TIN PRIMARY COVER.



KIT SHOWN WITH 3" OPEN PRIMARY BELT DRIVE AND PRO-CLUTCH.

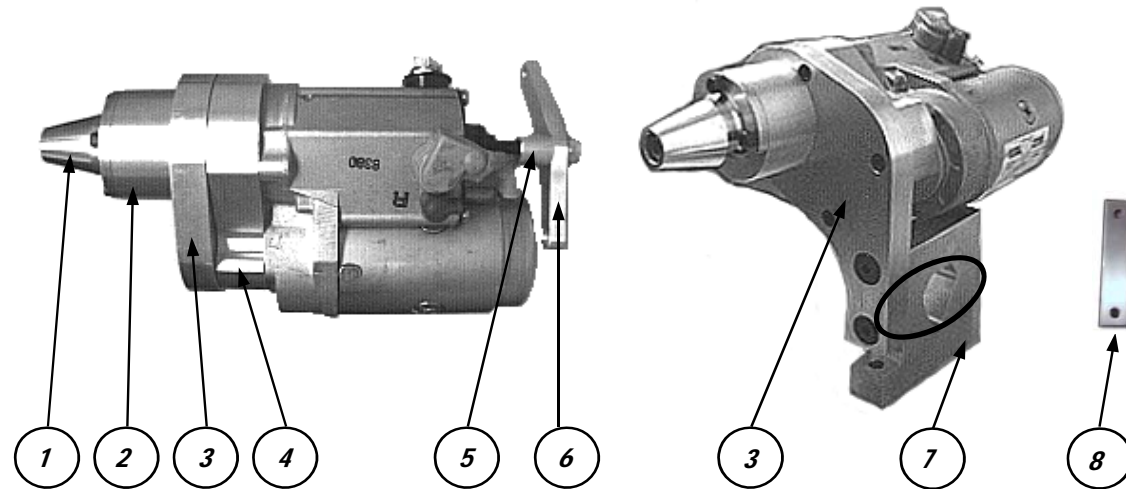


CHROME ELECTRIC START OIL TANK SHOWN WITH 12 V LOW PROFILE GEL BATTERY.

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PAN HEAD/KNUCKLE HEAD ELECTRIC START KIT INSTALLATION INSTRUCTIONS



NOTE: WHEN INSTALLING THIS KIT, IT IS NECESSARY THAT AN ELECTRIC START, HORSE SHOE STYLE OIL TANK, A LOW PROFILE BATTERY WITH AT LEAST 255 CCA, A 12V ELECTRICAL SYSTEM AS WELL AS THE RECOMMENDED 1 1/2" PRIMARY BELT DRIVE BE USED TO INSURE PROPER FIT AND FUNCTION. ALL OF THE PREVIOUSLY MENTIONED ITEMS ARE AVAILABLE FROM TECH CYCLE. SERVICEABLE THREAD LOCKER MUST BE USED ON ALL SCREWS DURING INSTALLATION.

1. REMOVE BOTH THE INNER AND OUTER TIN PRIMARY COVERS, PRIMARY DRIVE, BATTERY, OIL TANK AND CLUTCH RELEASE ARM.
2. PRESS INNER CLUTCH HUB INTO OUTER CLUTCH BASKET
3. LOOSEN REAR AXLE AND REAR CHAIN. LOOSEN THE FIVE (5) BOLTS THAT SECURE THE TRANSMISSION TO THE TRANSMISSION PLATE.
4. PRE-ASSEMBLE THE FRONT PULLEY, BELT AND REAR CLUTCH BASKET. ADJUST TRANSMISSION TO SET PRIMARY BELT TENSION. TIGHTEN TRANSMISSION BOLTS AND RE-ADJUST REAR CHAIN. TIGHTEN AXLE.
5. INSTALL STARTER MOTOR ASSEMBLY TO TRANSMISSION PLATE WITH (2) 3/8-24 CAP SCREWS PROVIDED. NOTE: ON SWINGARM APPLICATIONS, SOME CLEARANCING MAY BE REQUIRED ON ITEMS #3 AND #7 IN CIRCLED AREA.
6. REMOVE ITEM #1 AND ITEM #2. USING A PAIR OF VICE-GRIPS, PULL STARTER PINION GEAR OUT TO SET THE RING GEAR DEPTH. TECH CYCLE RECOMMENDS .010"-.020" GAP BETWEEN THE RING GEAR AND THE PINION GEAR. THIS IS DONE BY SLIDING ITEM #3 UP OR DOWN IN RELATION TO ITEM #7. TIGHTEN THREE HEX HEAD BOLTS WHEN PROPER DEPTH IS ACHIEVED. REINSTALL ITEMS #1 AND #2.
7. INSTALL SUPPLIED STAINLESS STRAP, ITEM #8. MARK THE TOP HOLE, DRILL AND TAP FOR THE SUPPLIED #10-32 CAP SCREW AND INSTALL SCREW. DO NOT COMPLETE THIS STEP UNTIL PNION/RING GEAR CLEARANCE IS SET. NOTE: THIS STRAP IS NOT USED ON SWINGARM APPLICATIONS.
8. INSTALL CLUTCH RELEASE ARM. THE STOCK CLUTCH ARM MAY NEED TO BE HEATED AND BENT TO CLEAR THE STARTER. A TECH CYCLE CLUTCH ARM CAN ALSO BE USED IN THIS APPLICATION. THE CLUTCH CABLE WILL NEED TO BE SHORTENED OR ORDERED SPECIALLY.
9. INSTALL ITEM #5 ON STUD WELDED TO SOLENOID END CAP. ATTACH ITEM #6 TO CLUTCH ACCUATOR COVER USING (2) SCREWS THAT SECURE THE COVER TO THE TRANSMISSION CASE. MARK THE LOCATION ON ITEM #6 THAT LINES UP WITH STUD WELDED TO SOLENOID END CAP. DRILL CLEARANCE HOLE FOR 5/16" STUD AT THIS LOCATION AND SECURE BRACKET WITH LOCKNUT PROVIDED.
10. REMOVE FRONT BELT PULLEY AND BELT. HOLD UP INNER TIN PRIMARY AND MARK THE AREA AROUND REAR CLUTCH HUB TO REMOVE FOR CLEARANCE. CUT INNER TIN PRIMARY IN MARKED AREA. SEE MODIFICATION INSTRUCTIONS.
11. ASSEMBLE THE INNER TIN PRIMARY, FRONT AND REAR PULLEYS, BELT AND CLUTCH ASSEMBLY.
12. INSTALL OUTER TIN PRIMARY WHICH MUST BE ALTERED AROUND THE STARTER JACK-SHAFT. INSTALL FRONT AND REAR PULLEY. INSTALL OIL TANK SUPPLIED BY TECH CYCLE OR CUSTOMERS ALTERED OIL TANK.
13. INSTALL TECH CYCLE LOW PROFILE BATTERY OR EQUIVALENT. YOU MUST HAVE AT LEAST 255 CCA.
14. WIRE STARTER USING PROPER WIRING DIAGRAM AS WELL AS CABLE AND CONNECTORS PROVIDED.

PAN HEAD ELECTRIC START KIT STROKER/SWINGARM BRACKET INSTALLATION INSTRUCTIONS



FIGURE 1

BILL OF MATERIALS

ITEM	DESCRIPTION	QTY
1	BRACKET	1
2	INSERT	1
3	1 1/4" LOW SHCS	3
4	LOCK WASHER	3



FIGURE 2

NOTE: USE BLUE SERVICEABLE LOCKTIGHT ON ALL FASTENERS WHEN INSTALLING THIS KIT.

1. REMOVE TRANSMISSION TOP AND INSTALL (2) 1/4"-20 UNC HELI-COILS WHERE ITEMS #3 & 4 ARE INSTALLED AS SHOWN IN FIGURE 1.
2. REINSTALL TRANSMISSION TOP AND INSTALL PAN HEAD ELECTRIC START KIT AS PER PAN HEAD INSTALLATION INSTRUCTIONS.
3. ONCE PINION HEIGHT IS SET AS PER INSTRUCTIONS, PLACE ITEM #2 INTO COUNTERBORED HOLE IF NOT ALREADY PRESENT. INSTALL ITEM #1 USING ITEMS #3 & 4 AS SHOWN IN FIGURE 1 AFTER REMOVING ORIGINAL CAP SCREW FROM HOLE.
4. SHIM SURFACE 'A' USING PLASTIC SHIM STOCK IF NECESSARY AND INSTALL ITEMS #3 & 4.
5. IF INSTALLING THIS KIT ON A PREVIOUSLY PURCHASED ELECTRIC START KIT IT MAY BE NECESSARY TO CUT RELIEF IN THE BACK OF THE PINION COVER AS SHOWN IN FIGURE 2.
6. COMPLETE INSTALLATION AS PER PAN HEAD ELECTRIC START KIT INSTALLATION INSTRUCTIONS.

PAN HEAD ELECTRIC START KIT TIN PRIMARY COVERS MODIFICATION INSTRUCTIONS

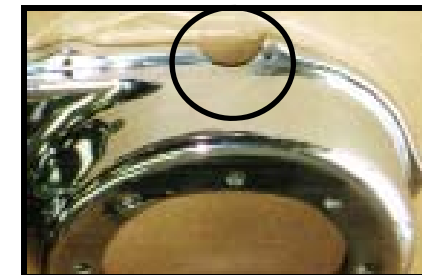


FIGURE 1

STEP 1: CLEARANCE OUTER TIN PRIMARY COVER AS SHOWN IN FIGURE 1 IN THE CIRCLED AREA. THIS IS CLEARANCE FOR THE NOSE CONE SHAFT SUPPORT ASSEMBLY. THIS SHOULD BE THE ONLY MODIFICATION NEEDED ON THE OUTER TIN PRIMARY COVER.



FIGURE 2

FIGURE 3

STEP 2: MODIFY INNER TIN PRIMARY COVER AS SHOWN IN FIGURE 2 OR FIGURE 3. THIS MODIFICATION PROVIDES CLEARANCE FOR THE RING GEAR MOUNTED TO THE BACK OF THE CLUTCH SHELL. FIGURE 2 SHOWS THE INNER TIN PRIMARY COVER MODIFIED AND REMAINING ONE PIECE. FIGURE 3 SHOWS A SLIGHTLY DIFFERENT MODIFICATION TO THE INNER TIN PRIMARY COVER AFTER WHICH THE COVER ENDS UP AS (2) SEPARATE PIECES. EITHER MODIFICATION WILL PRODUCE THE SAME RESULT. PLACE THE CLUTCH SHELL WITH THE RING GEAR ATTACHED ON THE INNER TIN PRIMARY COVER AND TRACE THE OUTLINE OF THE RING GEAR. THIS WILL GIVE YOU A GENERAL STARTING POINT FOR THE NECESSARY CLEARANCE.